FEB 5 - 1937

Hospital Library

the MODERN HOSPITAL

VOLUME 48 FEBRUARY 1937 NUMBER 2

SOMETIMES PEOPLE THINK they are getting a better value, if they get a lower price. But a dollar saved is not always a dollar made, especially in canned foods. There are so many of these in which quality is to be detected only by the most expert—until it reaches the table. Your customer's taste will tell! That's why it is really sensible and economical to standardize on Sexton sea foods. This fifty-year-old house cannot afford to furnish anything less than supreme quality—and the very lowest price its immense resources make possible.

Sexton Specials offer outstanding values in foods prepared exclusively for those who feed many people each day.

JOHN SEXTON & CO.

CHICAGO

Manufacturing Wholesale Grocers

Established 1883

BROOKLYN

America's Largest Distributors of No. 10 Canned Foods

© J. S. & Co., February, 1937

CONTENTS

For February, 1937

Cover Page — Perspective of new hospital at Stockholm, Sweden. Hjalmar Cederström, Stockholm, Architect.

Looking Forward 41

Prosperity is returning, agrees THE EDITOR, who comments on the need to discontinue depression financial policies, views hospital pension plans and salutes the Rosenwald Fund as it withdraws from its medical program. Other subjects of editorial treatment are hazards of nursing homes, sterilization methods, constructive criticism and hold-up hazards.

Training Ground for Specialists— 44

WILLARD C. RAPPLEYE, M.D., dean of the College of Physicians and Surgeons of Columbia University, sets iorth the effect that new certifying boards for medical specialties are likely to have upon hospitals.

Record Service Plus 46

Organization and correlation are the key words of the exceptional library service extended to the staff of Orange Memorial Hospital, Orange, N. J., as described by VERNA M. EMERY, the hospital's medical record librarian.

Good Will by Wire 49

Should be dispensed by every hospital telephone switchboard. It is a major duty of the administrator to see that this is done, says RAYMOND P. SLOAN, associate editor.

Films in Medicine 52

Suitable subjects are suggested by H. KENT TENNEY, M.D., University of Wisconsin, Madison.

What About Dependents? 53

Main facts concerning benefits received by wives and other dependents through hospital service plans are briefly presented by C. RUFUS ROREM, Ph.D., the director of the committee on hospital service of the American Hospital Association.

Balm for the Burned 56

Children at Cincinnati General Hospital has been provided by the completion of a new "burn" room.

Next Call for Attendants 58

To relieve the growing shortage of nurses. How well workers of this type fit into the hospital picture at Christ Hospital, Cincinnati, is told by FRED G. CARTER, M.D., superintendent of that institution.

Administrative Case Histories 59

Balancing the budget, preventing the exploitation of the house staff and gaining permission for autopsies are the topics covered by LEWIS E. JARRETT, M.D., superintendent of the hospital division of the Medical College of Virginia, Richmond, in his contributon to the increasingly popular case history series.

Cooperation—A Key to Public Support 63

Excerpts from an address presenting the financial situation of the voluntary hospitals, by HOMER WICKENDEN, general director of the United Hospital Fund of New York.

Just in Passing—

IN NOVEMBER we published in a form suitable for framing the code entitled, "Giving Information to the Press," drawn up by the Cleveland Hospital Council and approved by the public education committee of the American Hospital Association. At that time we offered to supply copies suitable for framing without charge. So far over 300 copies have been requested and the requests are still coming in. The supply is beginning to run low so anyone who still wishes a copy should request it now. The code will be found on page 84 of the November issue.

THE problem of purchasing in state institutions is complicated to a certain extent by the rules of the various states. In spite of these limitations, state institutions should be able to obtain just as high quality products as the voluntary hospitals. How to do this is set forth in two articles from Allentown State Hospital, Allentown, Pa. The first, concerned with the purchase of food, appears on page 100 of this issue. The second, dealing with the general subject of purchasing for state institutions, will be presented next month. Both articles have much information that is just as valuable to voluntary as to state hospitals.

FEBRUARY 3 has been named as National Social Hygiene Day. Hospitals will wish to join with other health agencies in observing the day. Under the vigorous stimulation of Surgeon General Parran, a direct and forceful attack is to be made on the venereal disease problem. We shall have more to say about this program later.

Published monthly by The Modern Hospital Publishing Co., Inc., 919 North Michigan, Chicago, and 101 Park Avenue, New York. Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Possessions and Canada, $3; foreign, $4. Single current copies, 35 cents; back copies, 50 cents to $1. Charter member Audit Bureau of Circulations.

Copyright, 1937, by The Modern Hospital Publishing Co., Inc.

Entered as second-class matter, October 1, 1918, at the Post Office at Chicago, Ill., under the act of March 3, 1879. Printed in U. S. A.

CONTENTS

BE SURE to note the article on sterilization (page 86). This is the first of the series of five promised last month. All members of the medical and administrative staffs having to do with sterilization should follow this series carefully.

NEXT month comes the annual building and equipment number of The MODERN HOSPITAL. Many administrators will study this issue with care and refer it to selected members of their board of trustees and department heads.

DR. G. WALTER ZULAUF has been bursting with pride now for some months. And who wouldn't be with one of the finest new hospitals in the country to administer. But he has earned it. The hospital was started in the predepression days and then work halted for lack of funds. WPA came to the rescue and now the building has been completed and occupied. Dr. Zulauf will tell the story, richly illustrated with plans and photographs, next month.

TUMOR clinics seem to be the pets of hospitals these days. Each large city either has one or more tumor clinics or is considering the establishment of one. There is, of course, some argument whether a tumor clinic should be part of a general hospital or should have an entirely separate existence in a tumor hospital. Next month Doctor Gallo of Paterson General Hospital will tell of the new clinic at his institution.

Hospital Barometer 8
The Editor Talks It Over..... 38
What Others Are Doing..... 62
Someone Has Asked..... 70
The Housekeeper's Corner..... 96
Tray Service 106
Food for Thought..... 106
Breakfast and Supper Menus..108
News in Review..... 110
Names in the News..... 118
Literature in Abstract..... 122
Books on Review..... 128
New Products..... 130
Index of Advertisers..... 10
Want Advertisements (Positions Wanted, Open, etc.)....145

A Hilltop Home 67
In beautiful Westchester County, New York, has been built for the nurses and staff of Vassar Brothers Hospital, Poughkeepsie. The description is illustrated with pictures of the present building and floor plans of the structure as it will be when completed.

Check for Checks 71
To wait or not to wait? The routine for collections at Albany Hospital, Albany, N. Y., can always give the correct answer. E. W. JONES, executive director of the hospital, and R. R. POTTER, office manager, explain the procedure followed.

Laundry in Modern Terms..... 75
Described and illustrated by RAYMOND P. SLOAN, associate editor.

As to the Special Clinic..... 77
Which is a product of the tendency toward greater specialization in the practice of medicine. JOHN E. RANSOM, assistant director of Johns Hopkins Hospital, Baltimore, defines the term and presents divergent views regarding the value of this branch of hospital work.

Two Problems for Trustees..... 79
The first concerns capital investment; the second, distinguished service. By ROBIN C. BUERKI, M.D., superintendent of the State of Wisconsin General Hospital, Madison, Wis.

Greeting Mr. Jones 81
Who knows nothing about hospitals, has always hated them, may not have been in one since a year before his first birthday. Here is the hospital's golden opportunity, says FRASER D. MOONEY, M.D., superintendent of Buffalo General Hospital, Buffalo, N. Y.

It's Inventory Time Again 83
Not only for equipment and supplies but also, says JOSEPH C. DOANE, M.D., the editor, for your scientific work, for your organization activities.

PLANT OPERATION

Sterilization Based on Temperature Attained and Time Ratio 86
This article by E. E. ECKER, Ph.D., is the first of a series of five on methods of sterilization in hospital practice. They represent the results of research done at the institute of pathology of Western Reserve University and the University Hospitals, Cleveland.

For Oxygen Administration 90
J. ARGYLL CAMPBELL, M.D., National Institute for Medical Research, London, England, describes a box mask and face tent for use in administering oxygen.

Designed for Fracture Work 92
Is the orthopedic appliance cart in use at Butterworth Hospital, Grand Rapids, Mich. CHARLES E. FINDLAY, superintendent, gives specifications for its construction.

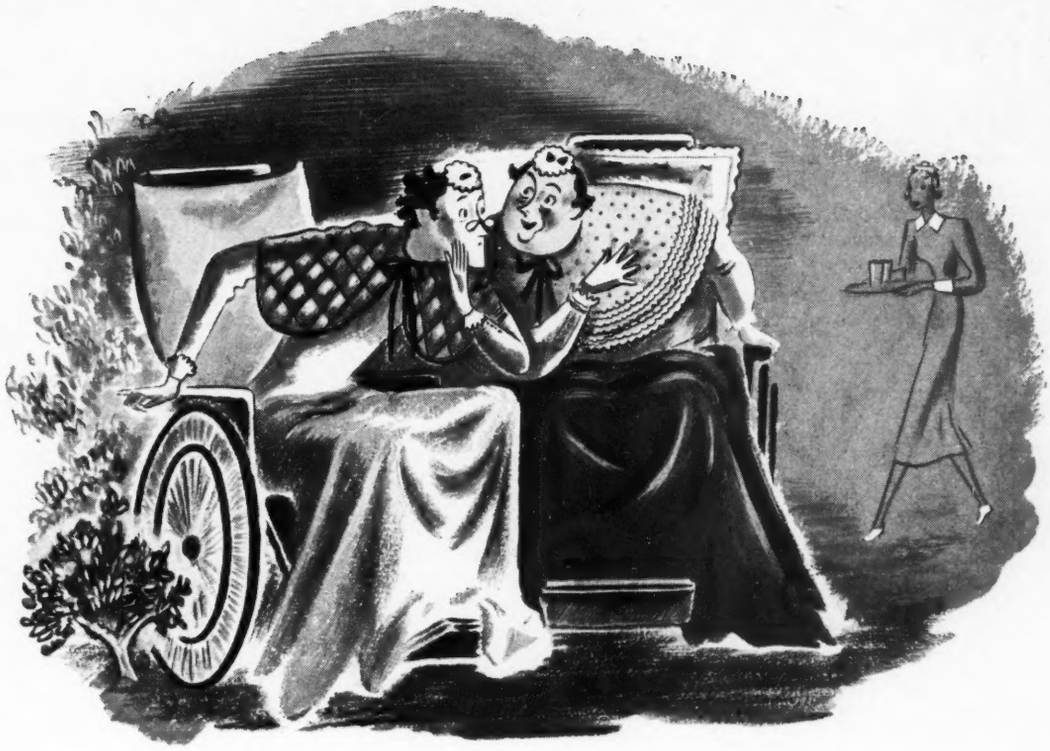
Managing the Maids 94
In a hospital taxes the ingenuity, declares ALTA LABELLE, housekeeper, Michael Reese Hospital, Chicago, who gives a comparative analysis of this work as carried out in hotels and hospitals.

Selecting Infant Incubators 96
Is the subject of this brief article by A. C. BACHMEYER, M.D., and FRED L. ADAIR, M.D., University of Chicago Clinics.

FOOD SERVICE

A Dietary Department Grows Up..... 98
In a 200-bed hospital after ten years' expansion. MARY E. SMITH, the chief dietitian at Memorial Hospital, Houston, Tex., traces its development and suggests its future activities.

How Do You Buy?..... 100
To cater for the thousands who live in state institutions is a heavy task. How to do it wisely but not too extravagantly is told by HORACE W. COOPER, steward at Allentown State Hospital, Allentown, Pa.



"I never knew it was such a fine hospital."

"Neither did I . . . until I discovered the CANNON TOWELS!"

PATIENTS may not always enter a hospital by choice, but when they do, they have their own ideas about comfort. Just ask them! (Or ask nurse. She knows!)

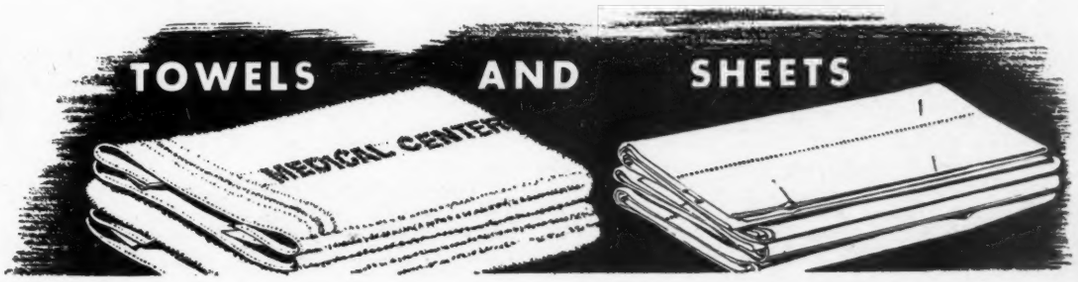
That's why most hospitals depend on Cannon towels exclusively. It's the sure way to avoid complaints from the patients. And from the stockroom too. Because once a Cannon towel enters service, it's a long time before it's "honorably discharged." Cannon towels are made for work, and they prove it!

Cannon offers everything you want in the towel line. Husky bath towels — name-woven to make them yours for keeps — or plain if you prefer. You can also buy the extra protection of reinforced hemmed selvages. Fine-quality Cotton and Union huck towels, either name-woven or plain. Bath mats to suit every requirement. Kitchen towels. Glass towels.

Ask your dealer to show you Cannon when you're in the market for any of these items. And let him tell you about Cannon two-way economy: Better quality at regular prices, or regular quality for less. . . . Cannon Mills, Inc., 70 Worth Street, New York City. World's largest producers of household textile products — and the largest advertisers to your patients.

Cannon sheets have as many fine points as Cannon towels. There's a Cannon sheet in each price class and for every purpose. Cannon Muslin, Cannon Utility Percale and Cannon Finest Quality Percale. Each one brings you more for your money.

CANNON



The Editor Talks It Over

• If the hospital ambulance could tell its story, what tales of pathos and pain, of hope and joy, or even of humor it could relate! To some the arrival of the ambulance means the advent of the dreaded moment of separation from loved ones. To many others it signifies that the door of hope for the relief of dear ones has been flung wide. And how true it is that the deportment of ambulance attendants, and even the physical appearance of the conveyance itself establish or shake the confidence of friends and relatives in the wisdom of entrusting the safety of the sick man to the hospital.

• The search for the cause of cancer has been futile in the production of either definite etiologic or curative developments. But hospitals should not assume an attitude of hopelessness with a resulting spirit of negativism when enthusiastic staff men recommend the organization of a cancer research department.

It is surmised that when the cause and the cure of this dread malady are discovered the physiologist, the chemist, the internist or the surgeon who begs for acceptance of his theories may receive the same ridicule and persecution which came to Jenner, to Morton and to Pasteur.

The childhood fable of the lad who, set to watch the sheep, cried "wolf" when there was no wolf and whose warnings when actual danger really arrived were unheeded, seems to be applicable to the cancer situation. Ofttimes and again has the cure of cancer been announced only to prove without foundation. Let not this fact, however, discourage hospitals from urging staff investigators to continue the search.

• Hospitals and cats seem to have an attraction for each other. At least on the part of the latter does there seem to be a great yearning to dwell in institutional subterranean passages, storerooms, kitchens and even within the isolated precincts of nurses' homes. Perhaps, the presence of a purring feline in an easy chair in the apartment of a no longer young nurse supplies a certain homelike companionship procurable in no other way. In some institutions cats and rodents which they are supposed to destroy form lasting friendships. At any rate, the hospital seems hardly the proper place for a motherly cat to bring up a family. It is suggested that a porcelain substitute be secured as a mascot for the nurses' home.

• In a large city hospital where departmental classifications include a large number of patients, medicine en masse is often practiced. Frequently in such hospitals and less often in smaller ones are to be found men and women with little or no scientific background who have developed great skill in the care of the sick. An orderly in a dermatologic department, a college graduate and an ex-newspaper reporter, although unfortunately an alcoholic, had acquired such skill in the recognition of skin diseases that he was often consulted by distinguished specialists who visited his department. An unschooled accident ward orderly in a church hospital developed an uncanny ability to detect the presence of fractures while an attendant in a genito-urinary department became a specialist in the recognition of syphilitic rashes.

Such instances are of course no argument against didactic training but they do point strongly to the practical possibilities of clinical observation. The physician who endeavors to become a diagnostician by learning long lists of symptoms will soon be surpassed by him who spends an equal time in the observation of patients at the bedside. The lesson to be learned by hospitals is this: that unless classroom instruction is with equal patience and efficiency transposed into bedside experience, little is to be gained. Staff members owe it to their interns and nurses to pause and point out interesting symptoms.

• Some time ago we suggested in our editorial columns that it would be a good thing for hospital administrators to keep a close watch of medical literature in order to improve their position during professional discussions with members of the medical staff. An excellent example of the kind of writing with which hospital administrators should be familiar is "Water, Water Everywhere," by an old and sympathetic physician-friend of the hospital field, Dr. E. O. Harrold of Marion, Ind., whose contribution appears in the *Journal of the American Medical Association* for November 28, 1936.

The administrator who has been deviled in recent years by the visiting staff to purchase more and more watery solutions of various kinds for introduction into the sick human body and, particularly, those who cannot make up their minds whether it is cheaper to make such solutions on the premises or to purchase them ready-made in sealed ampules, would do well to read this article and ponder it. They might even go farther and, with a twinkle in the eye, draw it to the attention of the visiting staff.

Briefly, the author makes the point that we are now in a watery era when physicians generally, and particularly in hospital practice, are forcing fluids in every conceivable manner on the shotgun chance that lack of fluid is the cause of most of our maladies. The author's humorous presentation of the subject adds considerably to the effectiveness with which he makes his basic point.

• One of the younger members of a hospital staff presented a new and rather radical suggestion to the superintendent. The latter considered it carefully and rejected it without explanation. A few moments later he overheard the staff member talking to another one, "Yes, he turned it down. Well, what could you expect? He is a flat tire."

How many of us are considered by our associates as "flat tires"? Not many, it is to be hoped, but the lesson of this little story is the necessity for frequent inspection of our mental rolling stock with the view of determining that none of the tires are leaking, punctured or blown out. Of course if they are, the indication is immediate replacement by new, resilient, serviceable ones.

Getting to be a back number, a drag on the wheel of progress, or a "flat tire," depends entirely on one's mental attitude, and as such is capable of correction.

WORLD-FAMOUS HOSPITALS SPEED PATIENTS' RECOVERY

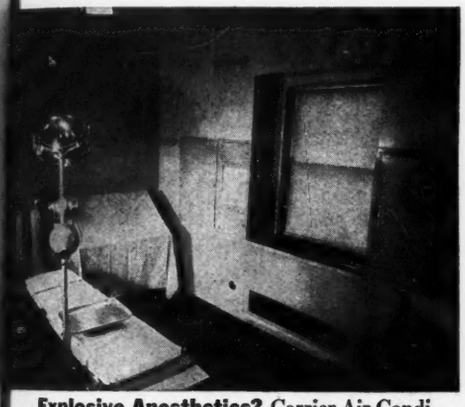
Improve working conditions with

Carrier

Air Conditioning

WHATEVER your needs—whether it be to air condition an entire hospital, or merely the operating or patients' rooms—you'll find a system that meets your particular needs at Carrier. Carrier has air conditioned and refrigerated hospitals in Argentina, Australia, Brazil, Hawaii, India, Japan and Mexico—to say nothing of great hospitals in the United States.

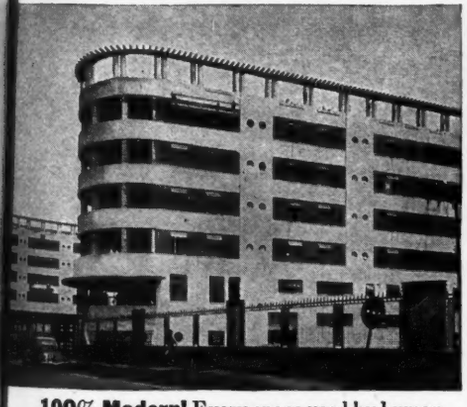
And you'll find that *now*—before the summer rush—the installation can be made without disturbing patients or interfering with daily routine. To make your hospital truly modern—to make your patients comfortable this summer—and your personnel more efficient the year around—call your Carrier dealer today.



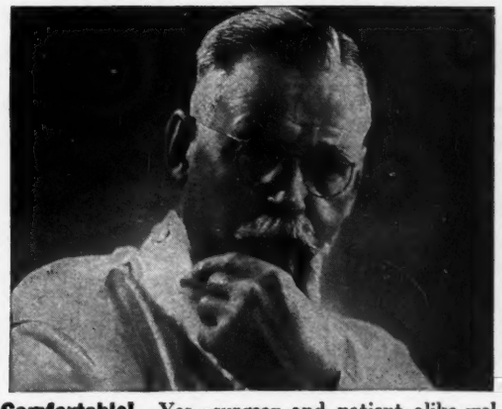
Explosive Anesthetics? Carrier Air Conditioning makes them safe to use in the operating room of the Robert Packer Hospital, Sayre, Pa., by keeping humidity at 55% or above.

Quiet, Please! No outdoor noises shatter patients' nerves in private rooms of the Skin and Cancer Hospital, Philadelphia, Pa. Carrier Air Conditioning supplies fresh, clean, draught-less air without opening windows.

Executives, Too, work better in a clean, healthfully conditioned atmosphere. So Loma Linda Sanitarium, Calif., installed Carrier Air Conditioning in its offices as well as space occupied by patients.



100% Modern! Every space used by human beings has the benefits of Carrier Air Conditioning in the Hospital de Los Ferrocarriles Nacionales, in Mexico City, Mexico.

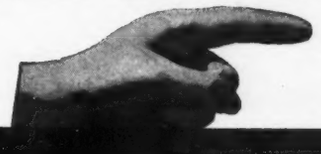


Comfortable! Yes—surgeon and patient alike welcome relief from the oppressive heat of operating lamps. No perspiration either, with Carrier Air Conditioning designed especially for hospitals.

"Doing Nicely," says the nurse. Why not? Her patient breathes the world's finest air . . . clean, fresh, invigorating, and gladly pays *extra* for the comfort of Carrier Air Conditioning.

*Willis H. Carrier and his organization have devoted their work exclusively to air conditioning since his first installation in 1902.

NOW IS THE TIME TO INSTALL Carrier AIR CONDITIONING



CARRIER CORPORATION, Desk 134,
850 Frelinghuysen Ave., Newark, N. J.

Please send me information on air conditioning ☐ complete hospital; ☐ operating room; ☐ patients' rooms.

NAME.....

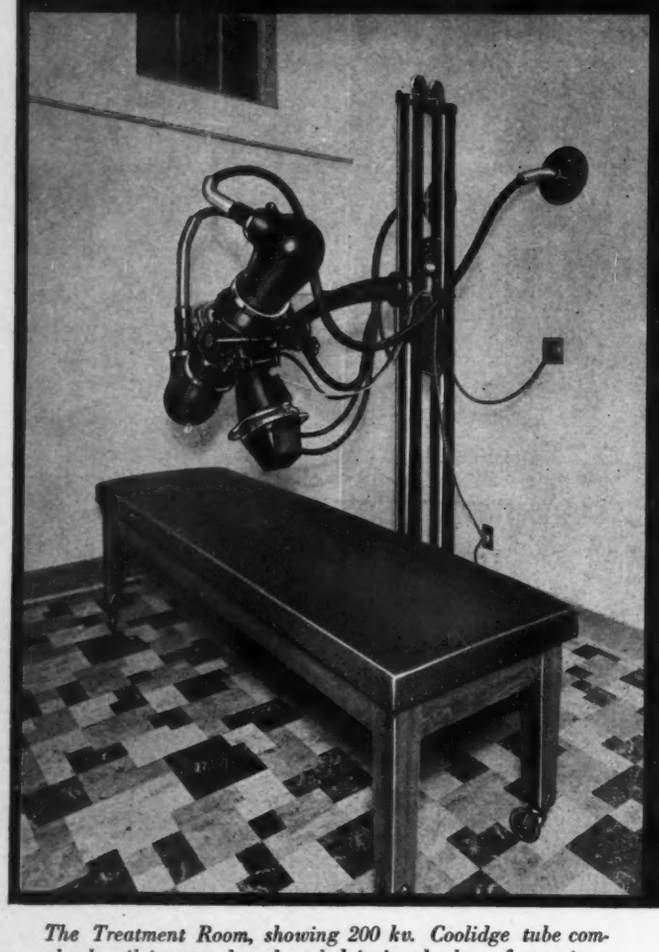
HOSPITAL.....

CITY.....

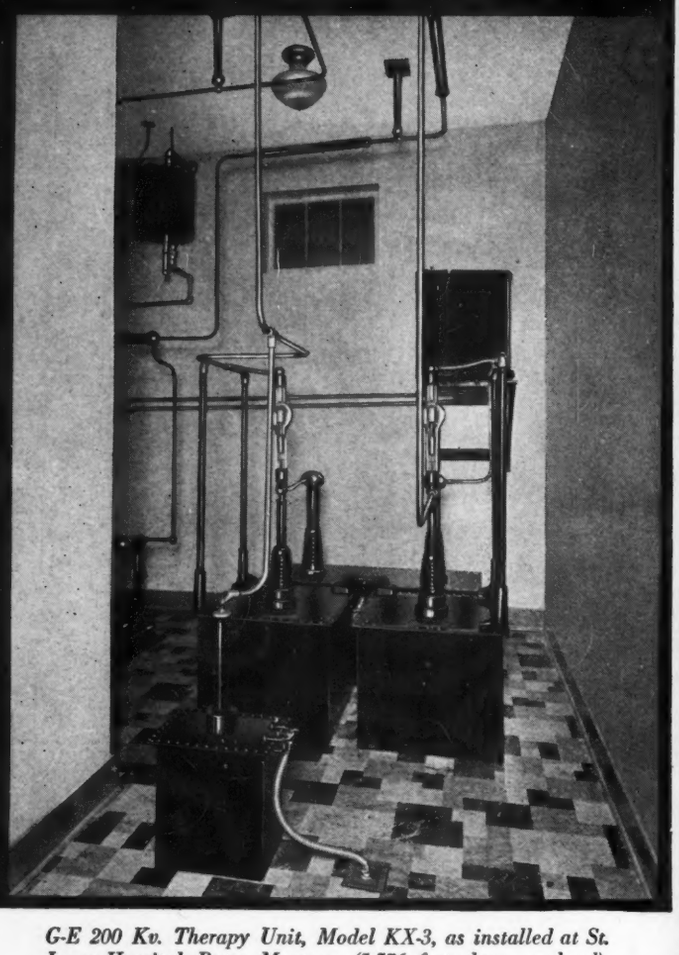
STATE.....

EACH G-E THERAPY INSTALLATION IS INDIVIDUALLY PLANNED

For Highest Operating Efficiency



The Treatment Room, showing 200 kv. Coolidge tube completely oil-immersed and sealed in its shockproof container.



G-E 200 Kv. Therapy Unit, Model KX-3, as installed at St. James Hospital, Butte, Montana (5,576 feet above sea level).

WHEN you buy equipment for x-ray therapy, one of the first considerations is its satisfactory operation—the number and quality of roentgen units that it will deliver per minute.

But a capacity rating based on average climatic conditions is not enough. You want assurance that the apparatus installed will consistently produce this energy under the climatic conditions which prevail in your particular locality.

The illustrations show the G-E Model KX-3, 200,000-volt therapy installation recently completed for St. James Hospital, Butte, Montana. Even though located 5,576 feet above sea level, this equipment operates at its full normal rating of 200,000 volts, 25 ma., and 220,000 volts, 20 ma. Thus the hospital is using it to the same advantage as might any other institution.

KX-3 installations are also operating in this same consistent manner despite the excessive humidities of seaboard localities, such as Miami and Tampa, Florida; San Diego and La Jolla, California. In all parts of the world, in fact, G-E therapy installations are operating unlimited by high humidity or high altitude.

Whether for 200,000-volt or 400,000-volt x-ray therapy, you can rely on G-E equipment for consistent performance. Let us help you plan the most practical and economical therapy installation for your particular requirements.

Address Dept. F12

GENERAL ELECTRIC X-RAY CORPORATION

2012 JACKSON BLVD. CHICAGO, ILLINOIS, U. S. A.

Looking Forward

Hospital Retirement Policies

BECAUSE charitable institutions are excluded from the provisions of the Social Security Act in no way indicates that law makers do not feel that faithful hospital workers should not be protected in their old age. Indeed one might doubt the appropriateness of the term "charitable" as applied to any institution which opposes or puts off endeavoring to work out some retirement plan for its personnel.

To be sure, there is an unusual turnover in the hospital's personnel and the problems thus involved may in some measure differ from those encountered in industry and yet surely the basic fairness of such a plan is common to both.

Some few hospitals have pension plans in operation; more perhaps reward the long service of a well paid administrator by a retirement grant than care for poorly paid yardmen, firemen, engineers and storekeepers. None will begrudge the executive such a reward but he is likely to have been able to accumulate a competency for his old age to a degree entirely impossible for those in lower brackets.

Such a plan is not charity. It is only common fairness to the faithful. It is hoped that the exclusions of the national act will not lull the hospital to forgetfuness of the cause of its long time employees.

Distinguished Service

WITH the announcement, published elsewhere in this issue, of a grant of $165,000 to a newly formed committee on research in medical economics, the Julius Rosenwald Fund brings to a close its direct concern with the fields of medical economics and hospital care. Dr. C. Rufus Rorem has already taken up his duties as executive of the committee on hospital service and has established headquarters at the American Hospital Association. Dr. Michael M. Davis takes up his duties with the new research committee shortly. His headquarters will be in New York City.

While certain work in Negro health will be continued, the department of medical services in the Rosenwald Fund is being terminated. This makes it opportune to review the activities of the Fund in this connection.

In a recent publication the Fund reports that a total of just under one million dollars has been spent for the medical service program. Approximately one-fourth of this has been for consultation services and administrative expense. For public information services there was expended $15,000 and medical studies and publications took $85,000. Grants to the Committee on the Costs of Medical Care totaled $90,000. Pay clinics at the University of Chicago, the institute for mental hygiene of Pennsylvania Hospital and Union Health Center, New York, were aided to the extent of $272,000 and middle rate hospital services at Massachusetts General Hospital and the two hospitals in Keokuk, Iowa, were given $132,000. Just under $5,000 was granted to the American Social Hygiene Association for a demonstration of public education in syphilis control and $22,000 was given to various local projects in Chicago. Demonstrations by Dr. Bronson Crothers of Children's Hospital, Boston, in the care of nervous and crippled children were financed by grants totaling $147,000.

Thus the three projects closely related to hospitals, namely pay clinics, middle rate hospital services and care of nervous and crippled children, received a total of well over one-half of the total expenditures. In addition to these services for general health, the fund has made grants of $562,000 to hospitals and clinics under its Negro health program, and has awarded thirteen fellowships to Negroes for the study of hospital administration and health service, as well as many more in medicine and nursing.

The money contributions of the Fund have been helpful. While they have not, in every instance, resulted in outstanding improvements in hospital practice, they have blazed several significant trails. But more important than the cash contributions have been the initial leadership of Dr. Edwin R. Embree, president of the Fund and the personal work of Doctor Davis and Doc-

tor Rorem. Individually and in collaboration they have assisted hospitals in many ways. One need only to recall the development of the hospital institute and hospital administration course at the University of Chicago, the study of hospital capital investment, the work on hospital accounting, the pushing of group hospitalization, the assistance given to the work of the A. H. A. council, the service on the Committee on the Costs of Medical Care and the President's Committee on Economic Security, and the many practical studies of existing programs for bringing medical and hospital care within the reach of more people.

As the Rosenwald Fund withdraws, over the next five years, from its medical program, hospital administrators throughout the country will salute the Fund and express appreciation for intelligent, effective and tactful cooperation.

What to Do With Prosperity

A BRIGHTER, more optimistic note pervades the annual reports of business concerns generally. The cheery announcements of dividends and bonuses about to be paid serve as factors of forgetfulness of past financial distress. This is a verity which few will dispute. As budgets again approach balance, or as is more often the case deficits become less alarming, the board of trustees must adjust the financial program of the hospital to meet the most pressing institutional and community needs. Repairs have been long neglected. Here and there major renovations or additions are necessary. The hospital plant should be slowly brought back at least to its predepression condition.

What of the salaries of faithful workers ruthlessly cut when stark necessity faced the institution? Perhaps inequalities and unfairness for some reason existed in old wage scales. It is timely to correct these faults now. Now is the time to begin paying a living wage to deserving employees. To persist in present unfair rates of personnel pay because no strenuous objections have been raised is not the course of justice.

New apparatus, new supplies so long needed may now be purchased with confidence. If needed departments were dropped, plan now to replace them again in the hospital organization set-up.

In short, a comprehensive plan for the future financial conduct of the hospital should be carefully adopted. Spending money not in the possession of the hospital or in immediate prospect is unwise. To continue indefinitely, however, the inadequacies of services or salaries made necessary by depression days is an equally short-sighted policy.

Ask Me Another

EVERY now and then the daughter of a hospital administrator or a hospital trustee decides to carry, for a few years or many, the lamp of Florence Nightingale. Because the administrator wants for his daughter no special favors, he usually advises her to take her professional training at some hospital other than his own.

How carefully he selects the school in which his daughter is to enroll! Its curricular standards and its teaching staff must be of highest calibre. The reputation of its graduates must merit the respect of medical profession and public. The housing and recreational facilities for its pupil nurses must be excellent. His daughter is guided, as she should be, by his superior knowledge.

For his brother's child, the hospital superintendent or trustee is precisely as judicious as for his own daugher. Or is he now?

Apparently he is not, or how do we explain the inferior educational and social standards of so many nursing schools and their graduates? How also do we explain the news stories—admitting they may be exaggerated—of nurses trapped in burning firetrap houses and of morons slipping up fire escapes into unguarded and unprotected nurses' homes? How do we explain these things? Perhaps there is no justifiable explanation.

For Better Sterilization

SOME of the practices in hospitals date from the more or less remote past and have become traditional. This is true of numerous procedures that deal with disinfection and sterilization. The claims of makers of disinfectants and of sterilizing equipment, based upon tests of their efficiency, have been difficult to control one against another and consequently misleading.

So-called standard methods of determining the effectiveness of disinfection or bactericidal properties have been excellent, except that many have failed to take account of the bacteriostatic properties of these agents. Furthermore the standards differ among themselves and the results of one cannot be interpreted in terms of another. It has been found that variations in

the practical operation of autoclaves make it difficult to accept pressure readings as indicative of actual temperatures within the chamber. The critical examination of other means taken to disinfect or sterilize discloses avoidable defects in operation.

At the University Hospitals of Cleveland, there is a clinical staff alert to the possibilities of technical improvements, a laboratory staff well trained in bacteriologic methods, and ample and suitable laboratory equipment. Seizing upon this unusual combination of circumstances as almost unique for profitable investigation, the administrative staff stimulated a cooperative enterprise directed toward the establishment of controlled and adequate methods of disinfection and sterilization in all departments of the institution. This was carried forward by Dr. E. E. Ecker and associates under the direction of Dr. Howard T. Karsner, director of pathology of the hospitals and professor of pathology at Western Reserve University School of Medicine.

In order to acquaint the profession with the results as they are obtained, it has seemed wise to publish a series of papers covering special items of technique prior to a comprehensive and inclusive statement that may ultimately appear as a general guide for hospital practice and procedure. The first of these appears in this issue on page 86. As will be seen, methods of study have been selected only after a careful survey of those available. Modifications have been introduced where necessary, but the method for each type of investigation has become standard for that particular project. Simplicity of technique has been sought, so that others working in the same field will have no difficulty in application and interpretation.

The advantages that accrue to this institution as the result of the studies are gladly shared with others.

Hospital Utopias

EXECUTIVES are often distressed when the institution in which they work is the subject of community criticism. Frequently such censure is justifiable. Just as often, though, the criticism comes from those who are uninformed or who because of emotional and physical reaction to illness are not capable of forming a calm judgment.

The institution which receives no criticism may be compared to the individual who has no enemies. Both can be suspected of passively existing without making any mark of progress on the life of the community in which they live. It would represent the realization of an Utopian dream to discover a hospital that is never criticized. No such institution or community exists in a world of realities which is given to fault-finding.

On the other hand, the hospital should not accept this fact as an excuse for not endeavoring to correct its inefficiencies. The superintendent who is cast down when he receives an unfavorable reply to his letter inviting comments on the nature of the treatment administered should carefully examine his own psychology to endeavor to learn whether he has not become unduly sensitized to criticism.

Small wonder that the hospital is not more frequently censured when its many points of vulnerability are considered. Constructive criticism is to be courted, ridicule to be shunned. To place one's self on the defensive whenever unfavorable statements are made in regard to a hospital is to raise the question as to one's ability to serve it as effectively as is required.

Hold-Up Hazards

MASKED men, the brandishing of guns, the seizing of a hospital pay roll just as it was to be distributed to waiting workers—all these seem impossible as incidents in the usual calm of the institutional work day. But just this did recently happen in an Eastern hospital, with a woman administrator discharging a pistol after the fleeing felons.

It is surprising that oftener the lack of precaution or even of the practice of ordinary common sense in the handling of hospital monies has not resulted in loss by hold-up or theft. The sight of a hospital ambulance waiting at the door of a bank for the monthly roll is not unusual. The filling of pay envelopes in plain view of those who pass by in institutional corridors and the almost childlike belief that no one would be so cruel as to rob a hospital are plain invitations to the criminal-minded to attempt to do so.

Here ounces of prevention are worth pounds of cure. Delivery of pay rolls in armored cars —even contracting for the making up, delivery and paying of rolls are relatively inexpensive and highly safe. Pay roll insurance is another method of protection which is not costly. It is a curious fact that so few hospitals have either protective motorized delivery or pay roll insurance. To do less than this is both foolhardy and decidedly unfair to the public whose money the hospital handles.

Training Ground for Specialists—

By W. C. RAPPLEYE, M.D.

As advanced training in clinical fields can be provided only in hospitals and clinics any satisfactory program will have a widespread influence upon internships and residencies and will stimulate the teaching staff

AN ADEQUATE medical service for the country must include as essential features, a sufficient number of physicians who are familiar with current knowledge regarding general aspects of diagnosis, treatment and prevention of disease and disability, and a proper proportion of specialists who, in addition to a broad basic preparation, are qualified by additional training, technical proficiency and experience to perform the specialized services some patients require.

Recently the different groups of specialists organized national boards for the purposes of determining qualifications for admission to their examinations, conducting examinations, issuing certificates of competency and publishing lists of qualified specialists.

The Advisory Board for Medical Specialties assists in establishing uniform standards and in coordinating the activities of these boards. It has been influential in shifting the emphasis from experience, which in the past has been the chief requirement for admission to the examinations of the specialty boards, to one of adequate training as the important prerequisite for examinations and subsequent certification.

Some have maintained that the elevation of standards of medical training, which has been phenomenal in the last thirty years, would obviate the necessity of providing special facilities and programs for graduate instruction and would ensure permanently the highest type of medical service. It is now generally appreciated, however, that at best the undergraduate course can deal only with the principles of medicine.

Organized Teaching for Graduates Needed

The mass of scientific knowledge is far too great to be covered in detail in the usual period of medical training. Technical proficiency and advanced knowledge in each special field of practice must be postponed until after the basic preparation has been completed. It is clear that the basic medical course, no matter how excellent, cannot alone meet the situation, and that organized graduate instruction must be provided. The need of the country, already amply supplied with a sufficient number of physicians, is not for more but for better doctors and for opportunities by which those qualified to specialize may be able to prepare themselves.

Inasmuch as advanced training in the clinical fields can be provided only in hospitals and clinics, any satisfactory program will have a widespread influence upon internships and residencies. Such a program will also open to hospitals new opportunities for public service and a further elevation of the quality of their services to the sick through the stimulation of teaching and a staff of doctors selected ultimately for their outstanding ability in various fields of practice.

There is general agreement that the proper preparation of a specialist should include three major phases of training. The first is a sound basic medical education which includes a hospital internship. The second is advanced training in those medical sciences concerned particularly with the limited field of clinical medicine in question. The scientific courses in even the best medical schools are designed to be introductory, elementary and general in character. One who wishes to qualify as a specialist should go far beyond that elementary training because it is apparent that upon a thorough grasp of the principles, methods and point of view of the medical sciences depends the future development of the specialties.

The third phase is a long, active clinical experience with graded responsibilities under the supervision of experts which will lead ultimately to thorough competency in the limited field of practice. This feature of the training can most satisfactorily be provided by hospital residencies which

An Open Door for Further Service

by proper organization of the house staff can be established in any hospital of reasonable size.

Perhaps the first step in any given hospital is an appraisal of its internship. Many internships contain little of educational value; frequently they are a device for securing a house staff and for carrying out certain hospital routines, with few provisions for the further training of the young physician. Some internships in surgery allow students, for interns are students, to perform surgical procedures or to assist in major operations long before they are properly prepared in general medicine, pathology, diagnosis and the other elements of sound medical practice.

The length and form of the internship, whether rotating, straight or mixed, are not as important as the volume of discussion would imply, because sound methods of study, diagnosis and treatment can be given on almost any kind of service. The really essential features of a satisfactory internship are the right kind of a staff and active educational direction of the interns by those of the staff qualified to perform that function.

Residencies should be created in many hospitals after the activities of present internships are reduced to those features which may properly be regarded as preparing the recent graduate for the practice of general medicine, not as one who may be expected to be competent in surgery or other special fields. The residency should be advanced training in those clinical fields which the hospital can provide in the way of ward services under a single chief.

Laboratories for advanced study are necessary, as are library facilities, conference and seminar rooms and other features of an educational program. As in the training of an intern, the essential feature of residency training is a staff whose members are not only competent in their respective fields of practice but able, and sufficiently interested, to give time and attention to the development of young physicians on the house staff. It is personal instruction and supervision which is the essence of any procedure that warrants the designation of education.

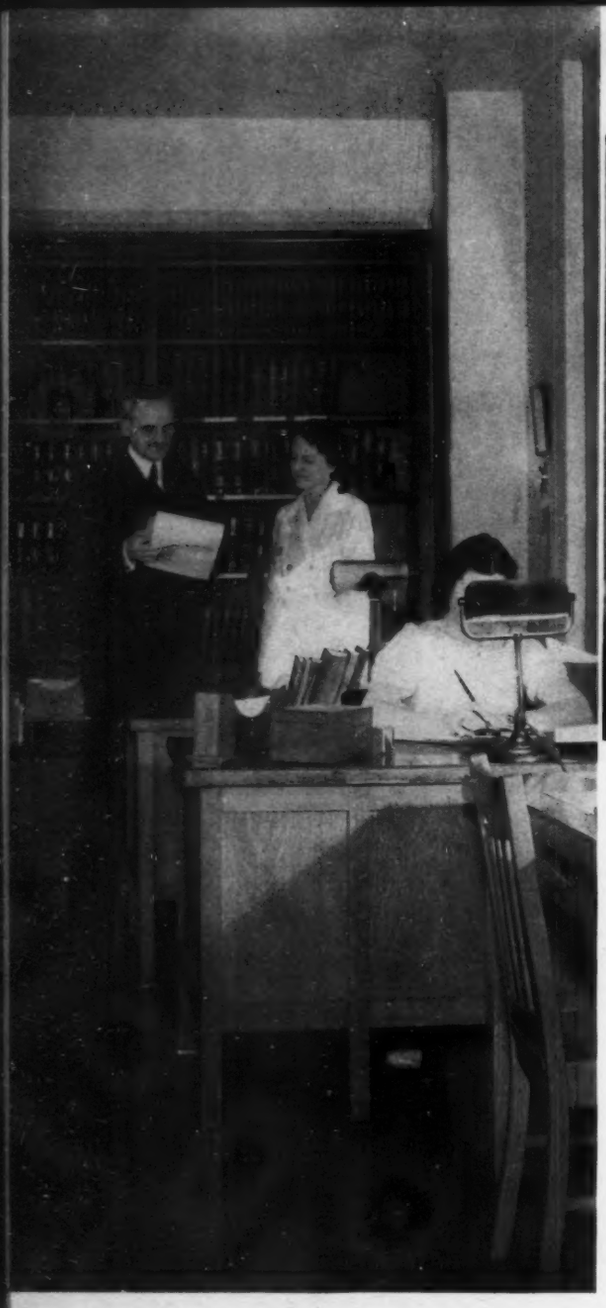
Beyond certain minimum requirements the form and length of the residency are relatively unimportant. The essential factor, as in all real education, is the human equation. For that reason programs of graduate training should provide considerable flexibility in order to meet the needs and preparation of each student, allowing different institutions, within certain broad limits, to provide different types of residencies. The extensive hospital facilities found in every section of the country offer a unique opportunity and responsibility in the field of graduate education which at the moment is the weak link in the medical program of the country.

A program of graduate medicine in any given hospital is bound to affect favorably the care of the sick. A more mature and experienced house staff would be available at all times. The plan of instruction would embrace longer periods of hospital service, more laboratory studies, greater use of medical literature, more discussion of clinical problems, greater use of consultations, better histories and follow-up and keener attention to qualifications of the visiting staff.

Gaps in Medical Education

It is important that the graduate program be closely articulated with that of the training of medical students and with research in the various fields of medicine. The sequence from premedical education to retirement from practice should be regarded broadly as a single problem. An artificial segregation of the medical course, the internship, the training of the specialist and the continued education of the practitioner has created serious gaps in the education of physicians which should and can be avoided. Cooperation of the medical schools and community hospitals in the several areas of the country can secure a better integration of medical education and practice.

There is now substantial agreement among medical and hospital leaders on the general principles outlined. It is neither possible nor desirable that complete uniformity be demanded, except in basic principles, for each institution and local group should be free to work out its own problems. A number of universities have plans and are proceeding to organize their efforts in graduate instruction, particularly in providing opportunities for advanced training in the medical sciences and general supervision of clinical instruction by means of a graduate degree in medicine.



Record Service Plus

By VERNA M. EMERY

THE term "record room" suggests simply a permanent storage place for patients' records—a mausoleum in which these important human documents are often interred quite as literally as the mortal remains of those whose end they may describe. Why does this name continue to be applied to what should be a never ending center of information?

A primary aspect of the record system at Orange Memorial Hospital, Orange, N. J., is the unit plan which we carry out minutely. All of any one patient's records are filed in one hospital folder including accident record, hospital record and all out-patient department and follow-up clinic records for all of his hospital admissions.

A routine search is made each day of the card files for a record of any previous admission of each admitted patient. A referral list of ward cases is sent to the out-patient department each day. Thus the unit system is kept under constant control with a minimum amount of time and energy, with a maximum amount of accuracy.

The histories of ward cases, including progress notes, are written by the interns. Private case histories are written by the attending physician or are dictated by him to the record library staff. All ward case histories are signed and the accuracy of the diagnoses and technical names of operations are checked by the chiefs of the respective services. Cases treated only in the accident room are filed alphabetically by year.

The record department has knowledge of a new patient fifteen minutes after he has been admitted, for the admission card is sent directly to the record department from the admitting office. An information card bearing data of special import for the use of the telephone operators is typed by one of the library staff immediately upon receipt of notice. The following morning all cards of the previous day's admission are sorted alphabetically and our permanent files are carefully searched and any readmissions are noted on the respective card by placing the old unit number on the current admission card after which the cards are segregated

into "readmissions" and "new admissions," the new ones being, of course, given a new unit number in red ink. This card contains identification data, financial status, name of referring and attending physicians, service, space for diagnosis and operation and results.

These are then listed in an admission book, giving respectively the unit number, last name, first name, location of patient in the hospital and date of admission. They are then sent to the accounting office for about two hours. When they are returned they are sorted into the current in-patient file in the record department.

The charts of patients discharged the previous day are delivered to the record department where they are carefully checked as to order of the various component parts, reports of all tests and other diagnostic data, treatments and surgical procedures, completeness of history, physical examination and progress record, clinical temperature record and bedside record. If any of these items are missing, an "incomplete ticket" is made out, enumerating the various inadequacies, and is sent to the proper party for completion.

Recapitulation Book Made Up

After the charts are completely criticized, the information cards of all patients discharged the preceding day are sent to us by the census clerk. The admission cards for these discharged patients are removed from the in-patient file and the date of discharge noted. From this group of cards which have now become our history or name cards, the recapitulation book is made up, giving the number of patients discharged by service, both male and female, as well as the deaths by the same classification. Following this, the dates of discharge and unit numbers are placed in the registry. They are then listed in the discharge book and filed in the current month's discharges.

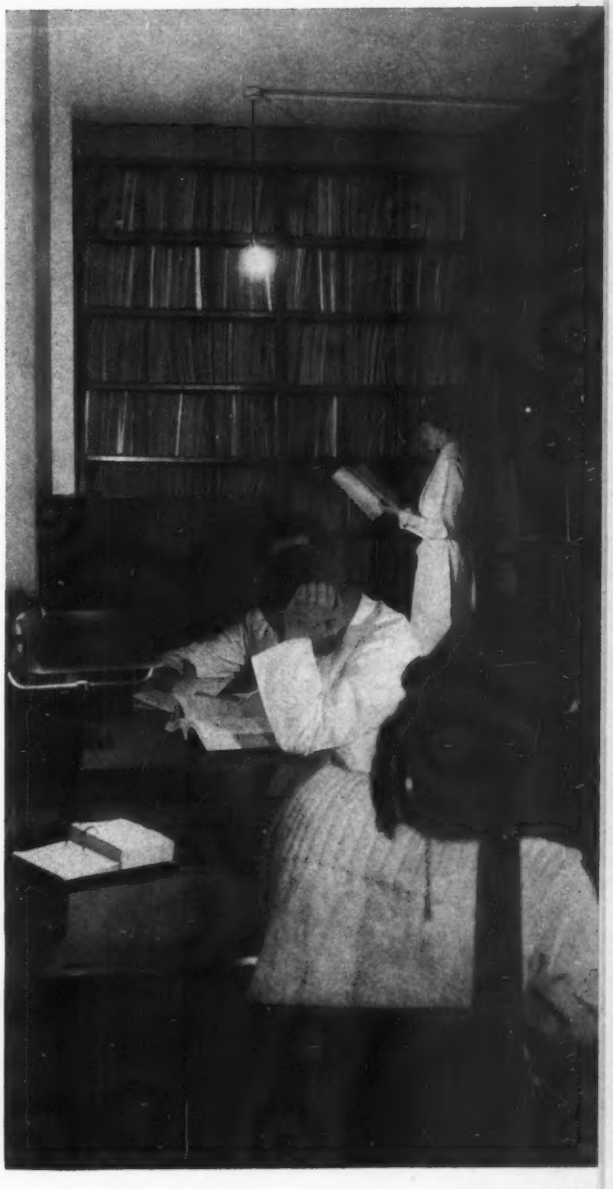
Our cross index of diagnoses and operations is kept in a unique loose-leaf form. The "card" idea, which is all there is to most record systems, has been reduced to a single card, that one taking two forms, namely, admission, and history or name card.

The use of cards for the name file not only minimizes the filing space and the cost of files, but also takes less time.

In our loose-leaf catalogue of diagnoses and operations we cross-file each case nine ways and include all of the routine high lights of each. Though the punch card system possibly gives an index of more items, these are not catalogued finely enough to be accurate when used apart from the actual case record.

The space saving feature we have found to be major. The space necessarily allotted to each year's cross index of diagnoses and operations by this method is 300 cubic inches as against 3,000 cubic inches for a straight index of primary diagnosis with an average turnover of 7,000 patients per annum. Here, again, the economic budgeting of time in the record department plays a part, as sixty cases can easily be catalogued in one hour's time.

To minimize the duplication of work and to secure economy of time in the various parts of the day's routine, we have correlated the medical library with the record library, which summarizes the otherwise scattered sources of medical infomation into one unit. We believe this to be an asset in the more rapid clearing and completion of records and an aid and inspiration to group studies. Books are catalogued and stacked ac-



cording to the branch of medicine with which they deal.

There is also a subject catalogue in which is included an index of each main article in the various medical journals and periodicals under the disease discussed. These are also cross-referenced under the name of the author. The catalogue system used for indexing these is the Standard Classified Nomenclature of Disease, which is also used to catalogue the diagnoses and operations of patients.

This correlation of the medical library with the record library seems to have shown at least two practical advantages.

Advantages of Correlation

The librarian, or her assistant, when asked for a reference in the medical library, on, for instance, diabetes mellitus, does not have to search for the particular number of that subject in her medical library catalogue or to differentiate between the numbers for that division in the diagnosis catalogue and the medical library catalogue. Since the same number is used for both purposes, she should be well acquainted with it from her daily indexing of patients' records, and able to turn directly to the literature in the medical library. If the physician making the request desires to compare the literature with some hospital cases she can refer to these just as quickly.

A second advantage is that all the literature, both in books and the varied articles in professional periodicals, is catalogued together. This is a great time-saver, it spares energy and certainly makes for less confusion.

The unification of all medical information has seemed to be an inspiration to group studies among the physicians. One five-year survey of lobar pneumonia cases served as an aid in the treatment of ensuing cases. The sequel of this study was a 90 per cent typing of all lobar pneumonia cases and a definite improvement of the quality of all records, especially on the medical service.

A five-year study of septicemia resulted in a slight difference in treatment and a lowered mortality.

The high standard of the surgical staff and operating department was demonstrated by the results of a year's survey of appendicitis cases showing that among the ward cases not a single death occurred from this cause in an entire year.

Other case surveys and articles completed through the cooperation of medical staff and library are polyneuritis of pregnancy; calcium deposition following intramuscular injection of calcium gluconate; a syndrome resembling angina pectoris; multilocular cyst of liver; pilonidal sinus; cancer survey—six years; lobar pneumonia —transfusion therapy.

It has been frankly admitted by physicians, both on our own staff and on the staffs of several other large hospitals, that the greatest cause for their apparent "inanition" in the group study idea was lack of time necessary to do all the research, both of literature and case records, and to prepare the statistics that must accompany such surveys. We endeavor to relieve our physicians of this responsibility. We made all of the graphs and lantern slides developed from these studies and assisted in editing and proofreading various articles and manuscripts accompanying them. At the present time the library is cooperating in this manner in seven case surveys: a six-year (surgical) gall bladder survey; a comparative study of meningitis, encephalitis and poliomyelitis; osteopetrosis; results in abdominal surgery; hypoplasia; a three-year mental survey, and a cancer survey, a continuation of the completed six-year study from a pathological viewpoint.

Our chief aim has been to increase the value of the department to the hospital, the superintendent, the board of governors and the physicians, with the definite goal of assisting all in their service to our community. If the group study were carried out in all hospitals it seems reasonable to expect it to result in a great forward step toward prophylactic medicine.

Furthermore, a central bureau for this purpose in each state or group of states, seems to be a possibility if the idea of group studies in all or the major part of our hospitals throughout the nation could be launched.[1]

[1] Read at the annual meeting of the New Jersey State Hospital Association.

Forty Ways to Stop Noise

Every hospital superintendent who is sensitive about the feelings of his patients is constantly on the alert to prevent or control noise. Noises that annoy patients are of two kinds, according to an article by Dr. Morris Hinenburg, superintendent, Jewish Hospital, Brooklyn, N. Y., in the fourteenth edition of The HOSPITAL YEARBOOK. There are first the extramural noises caused by street cars, automobiles, children at play, building operations and the thousands and one things outside the hospital's walls and usually outside its control. These can best be controlled through mechanical means since antinoise statutes have been found difficult to enforce.

The noises within the institution are far more numerous but easier to control. For example, friction hinges, rubber jamb inserts, rubber silencers attached to door knobs, door checks and other serviceable devices should be installed to prevent doors from slamming.

Doctor Hinenburg lists more than forty different ways in which hospital superintendents may take effective action against needless noise.

Good Will by Wire

By RAYMOND P. SLOAN

POTENTIAL emissary of good will, the telephone switchboard seldom is given an opportunity to perform its rightful function in the hospital office. As watchful as the executive eye may be in checking other activities, this agent for some unknown reason is taken for granted, its care entrusted frequently to inadequately trained attendants, who dispense courtesy according to their individual temperament and the state of their digestion.

How many hospital executives check the treatment accorded outside callers over the wire? The public wants to know. Telephone companies who are endeavoring to cooperate with hospitals in improving their telephone service want to know. By checking is not meant an estimate based on their own experiences or those of their department heads. The sound of their voices assures them prompt attention. That, in fact, is precisely where the danger lies. On the surface all is well. What happens between the outside caller and the attendant remains a secret between the attendant and the person at the other end of the wire. That is, unless the violation of etiquette is so flagrant as to justify a specific complaint.

Lack of Courtesy

Both public and telephone officials have their own ideas on the subject. For its part the public contends that the hospital does not extend the same courtesy over the wire as do other organizations, notably business houses and particularly department stores and hotels. Lack of interest, haste, absence of "progress reports"—that is a report given voluntarily to the calling party to inform him that proper attention is being given to his call—these are just a few of the complaints. Even more general is neglect to deliver any message to the patient reporting the inquiry about his health. "Why do I call the hospital if not to let the patient know that I have shown him that attention? Surely not for definite information about his condition. I know the answer already —'Doing nicely,' or 'As comfortable as can be expected.' "

Do not ask, "Who is this?"
when answering another person's telephone and the calling party does not volunteer his name.

If the person called is not available, say—

"MAY I TELL HIM WHO CALLED?" or

"MAY I TAKE A MESSAGE FOR HIM?"

If the person called is available, and you are required to announce the name of the calling party, say—

"MAY I TELL HIM WHO IS CALLING?"

Telephone officials are equally concerned. Facilities are provided under their auspices for training and instruction in telephone etiquette at no charge or obligation whatsoever, and advisory services are available at all times. Yet investigation points to the fact that hospitals are less receptive to the possibilities of building public good will by wire than many other organizations. Why is it?

The answer may be a frank admission of lack of attention to this particular detail. "We have so many more important things to think about." It may be attributed to inefficient help, the inability to pay sufficiently high wages to attract competent attendants, or the fact that the telephone operator must share other hospital duties. Whatever the specific cause, the fact remains that the switchboard stands there, ready to espouse the cause of good will, yet there is little ado about it. All the while, however, much is heard of the growing need for better public relations, the vital necessity for closer community contacts, the importance of establishing a broader base for financial support.

Granted that the telephone board can become a potential emissary of good will, as it has been characterized, the question presents itself of how to accomplish it? How can it emerge from practical obscurity behind its burlap screen and perform its rightful function as the real pulse of the entire institution?

The first step should be a careful and analytical study of the activity of the switchboard. How many incoming calls are received on a daily average—how many outgoing calls? Are the exclusive services of an attendant required to cover the work competently, assuring her adequate opportunity for extending every courtesy? If the station is not particularly active, what other duties can she safely assume? Sometimes changing the position of the board even as much as an angle of 80 or 90 degrees will facilitate the number of motions involved and make it quite possible for her to do other work at no sacrifice to the telephone service.

Supervision Is Required

Whether one attendant or more is required, they must be carefully chosen. Granted that the "Voice with a Smile" is seldom available, at least for a very few dollars a week, the problem presents itself of making the most of the material on hand. Right here let it be said that no matter how ideally suited the girl may be to her job or how cleverly she may handle unexpected situations, she requires supervision. It is not enough to start her right. Telephone companies who are training thousands of girls throughout the country will attest to this. She must be supervised and checked regularly.

Whether the girl is a raw recruit or has had some telephone experience, she should be impressed with the importance of her job. Through her fingers fly innumerable priceless contacts with the outside world. It lies within her power to make many new friends for the hospital each day, and as many enemies.

What One Telephone Company Says

It is interesting to note what the New York Telephone Company has to say about the attendant's attitude toward her work and the manner in which she approaches it. "They should be impressed with the importance of indicating a general disposition to be helpful and willingness to listen. When talking to a person face to face the general expression—a smile or a gesture—helps convey the meaning; over the telephone the tone of voice alone gives expression. Realization of these points will have the effect of developing a desire to give better service. . . . High standards regarding courtesy and personal interest should be recognized as being of fundamental importance in giving good service. Sufficient supervision should be given to maintain these standards.

"Nervousness on the part of an attendant will often affect her manner. Nervousness is sometimes caused by lack of confidence or by inability to operate the switchboard satisfactorily due to insufficient instruction. The training, both initial and subsequent, which is given an attendant should cover in a comprehensive way the necessary information and instruction regarding the work performed in the various departments and any special services required by individual extension users.

"It is important that an attendant understand from whom she may expect to receive further help and that she have confidence in that person's ability and willingness to help her. . . . Dissatisfaction with her position, due to the hours, wages or the travel time required from home to work may be the cause of an unhappy state of mind on the part of an attendant which may result in an unsatisfactory manner. Inability to handle the work properly, due to poor health, or lack of sufficient intelligence may also be reflected in the attendant's manner.

"At the time of employment such items as hours and wages should be carefully explained to the prospective employee, and the person doing the employing should consider such items as good health, average intelligence, ability to operate and reasonable travel time as essential qualifications."

To sum up, the ideal attendant is one who conveys the impression that she really is interested in serving the caller and giving him the information he seeks. She will treat him as an individual, rather than merely as one of a mass.

Three Essentials of Good Service

Courtesy, accuracy and speed are the three fundamentals of good telephone service. It is interesting to note where deficiencies and irregularities are most frequently found.

First: plug-ins. This is described by the New York Telephone Company as follows: "A plug-in occurs on an incoming call when the attendant plugs in but fails to answer immediately. When a plug-in occurs, the ringing signal is stopped and the calling party is subject to the annoyance of being forced to wait with the knowledge that his call is not receiving attention. The habit of plugging lines is a frequent cause of slow answers."

Unfortunately the attendant is the only one who knows to what extent she holds up incoming calls. It is imperative, therefore, that some plan be evolved whereby these calls can be timed and checked.

Second: slow answers. "Ten seconds is the period within which signals on calls should be answered to provide good service. A slow answer may result in the calling party's not waiting."

Third: progress reports required—not given. "When a call cannot be completed immediately

because the called extension is busy, or does not answer, courtesy demands that the attendant keep the calling party informed and assured that efforts are being made to complete his call. These are termed 'progress reports,' and should be given at least every thirty seconds to encourage the caller to hold the line. If the called extension is still busy at the end of two minutes, the attendant should ask whether the calling party will talk with someone else, or whenever possible, suggest the name of someone else who can handle the call. When it seems advisable the attendant should offer to take a message."

A Simple Expedient

It has already been pointed out that many hospital calls are prompted solely by the desire to let the patient know that he is being thought of. How simple, therefore, to prepare a blank in pad form which can be kept on the attendant's desk, so arranged that the name of the caller can quickly be filled in as well as the name of the patient, and a line or two provided for any message. The interest with which the patient receives this, and the comfort to him in knowing that friends and relatives are thinking about him, can easily be imagined. What satisfaction, also, to the caller to know that his efforts have not been in vain, and that the patient will actually receive tangible evidence of his thoughtfulness.

The fourth possibility of inefficiency in telephone service, according to the same source, lies in slow answers to recalls. "Recall signals are sometimes received on established connections and indicate to the attendant that assistance is required by an extension user. As a recall can only be answered from the position on which the connection is established, it is important that it be given prompt attention. Ten seconds is the period within which recalls should be answered.

"Other errors are wrong numbers, double connections, cut-offs and incorrect reports. Irregularities include such practices as failure to answer with an identifying phrase, failure to acknowledge, cutting out too quickly, inattention and poor voice work."

A few words of explanation should be given to the identifying phrase. Approved telephone etiquette demands that the introduction name the institution, as for example, "Union Memorial Hospital, good morning, or good afternoon," or with the salutation omitted. Aside from the efficiency of this approach, it constitutes good advertising. A letter-head announces first the name of the institution. Why should not the same idea apply to the telephone call? It may seem unnecessary to make reference to this modern practice, but investigation has proved how seldom it is actually carried out. Far more common even today is the time-worn expression "Hello, yes, this is Union Memorial. What is it you want?"

It is considered more courteous not to ask "Who is this?" when the calling party does not volunteer his name, but if the person called is not available to ask, "May I tell him who called?" or "May I take a message for him?" Then, if the person called is available and it becomes necessary to announce the name of the calling party the attendant can say, "May I tell him who is calling?"

Ascertaining the name of the calling party makes it possible for the attendant to extend a personalized service, which has already been referred to as highly desirable. She can then say, "Would you mind holding the line, Mr. Smith, while I ring the room (or floor)." It enables her also to end the contact pleasantly, making the caller feel that his interest is welcome. "Thank you for calling, Mr. Smith, we'll notify Mr. Jones that you called." She should also secure specific information from the calling party whenever the call is for a person whose name is the same as that of some other patient, as for example when there is more than one Mr. Smith, or a junior or senior Mr. Jones. To avoid confusion in similar sounding names they should be spelled.

Printed Instructions Help

The attendant should be instructed in these major principles of good telephone etiquette before she is actually placed in charge of the board. It would even be well to print such essential instructions plainly and keep them constantly before her as a reminder, and then to check and keep checking to ensure her following them.

In checking telephone service there are other points to be considered. Speed of operation is never to be regarded as more important than being attentive to the calling party by allowing him to finish speaking or remaining on the connection long enough to allow him to speak if he wishes to do so. To quote again from the principles outlined by the New York Telephone Company, "The attendant should be requested to visualize herself in the rôle of the calling party, and appreciate his extreme irritation when she cuts out of the connection too quickly, since he has no means of resignaling her except to place a second call. Although the act of the attendant which causes this irritation may not be premeditated she should understand that such carelessness reacts unfavorably on the institution as well as on her." Sometimes such haste is due to her desire to finish a personal conversation either over the telephone or with someone in the office. This is to be dis-

couraged, and not only the attendant herself but other employees should be checked for any violation of this rule.

In addition to instructing the telephone attendant in the elementary principles of telephone etiquette there should be included in her preliminary training memory drills of extension users' names and numbers, the kind of work handled in the various departments and the duties of various employees. It is desirable that such information records be easily available as an alphabetical list of extension users and departments, also an alphabetical list of places frequently called, local as well as out-of-town.

The Matter of Records

Any record files required should be located at the side rather than behind the attendant. Records also should be so arranged that they are convenient and easy to handle, and kept in a place where they will not hide signals. Everything in fact should be placed so as not to detract the attendant's attention from the board any more than necessary. Even the clock might be placed so as to be easily visible.

The switchboard is frequently deliberately concealed from sight which in itself is conducive to its use as a catch-all, for everything from handbags to cough drops and powder compacts. If the attendant is to take real pride in her work, she will want her station kept clean and businesslike at all times, with only essential forms and records in evidence. One way to encourage this is to provide accommodations for personal and business articles where they will be accessible, but out of sight. Food should never be served at the board.

Finally, it would be well to see that the telephone set is properly adjusted. Quoting again from the New York Telephone Company, "The lips should be close to and in direct line with the transmitter horn, and the attendant should be careful to speak directly into it. The set should be adjusted for her use after she is seated in an operating position, rather than while standing. Handkerchiefs or other material should not be placed between the ear and the receiver. The receiver band should be adjusted properly so that it will not require additional pressure in order to hear distinctly. The receiver should be placed against the ear in such a way that the cord connection is at the lower part of the receiver."

In this work of training the telephone attendant and establishing efficient working conditions, local telephone companies will gladly assist. The paramount question is to what extent the administrator recognizes it all as part of his public relations program.

Films in Medicine

By H. KENT TENNEY, M.D.

THE use of motion pictures in medical education is by no means new, but their scope is being considerably widened through the continued improvement of film and cameras. The addition of sound to pictures undoubtedly increases their usefulness, but makes them costly.

Sound pictures are made in two ways: sound is recorded at the time the picture is made or it is added to the completed film. By the first method various speach and voice disorders, the whoop of whooping cough, the stridor of infantile tetany, both of which would certainly be valuable for teaching purposes, can be recorded. In the second method a lecture explains the action as the picture progresses and amplifies the material usually covered by titles. Incidentally it has been found necessary in medical films to use much longer titles than are considered desirable in other types of pictures.

Subjects Suitable for Films

The selection of subjects suitable for demonstration by motion pictures is important. Surgical subjects are the most spectacular and surgical technique can be shown in greater detail and to a larger audience by motion pictures than is possible in the operating room. However there are other technical demonstrations that can be made in pictures which are equally valuable for teaching purposes. "Physical Examination of Infants," "Technique of Making Infant Feeding Formulas," and "Technique of Administration of Oxygen by Oro Pharyngeal Catheter," are films which we have been using with much success.

Case presentations are another type of film found effective. For these, cases are selected that are typical examples of a condition or that are a bit unusual. A brief summary of the clinical history is first given and then the characteristic features are demonstrated. Where material for clinical teaching is somewhat limited these films are convenient.

The film that combines clinical description and surgical demonstration covers a subject more completely. Examples of this type are "The Treatment of Empyema" and "The Differential Diagnosis of Vomiting in the Newborn." Several others are contemplated for future production.

For teaching nurses, demonstrations of nursing procedures in various medical and surgical conditions are filmed. No attempt is made in these to cover diagnosis or medical treatment; emphasis is placed on nursing care.

What About Dependents?

"I don't worry about myself, but I should like protection for my wife and family." Thus runs the argument of many an employed person when advised to budget his hospital bills

By C. RUFUS ROREM, Ph.D.

HAVE dependents been satisfactorily included in hosital service plans? Who are dependent persons and what benefits do they receive? Should or do subscription rates for dependents cover the full costs of services received? It is the purpose of this article to present briefly the main facts concerning dependent coverage in various communities, and the conclusions which appear justified at the present time.

Benefits to employed subscribers' dependents have been included in a wide variety of ways, ranging from automatic discounts to the family rate full coverage plan recently offered in New York City and elsewhere.

In New Orleans and in St. Paul, Minn., subscribers were for several years entitled to receive one-third and one-fourth discounts respectively from the hospital bills incurred by their dependents. The rate per New Orleans employee was $12 per year for private room accommodations, and in St. Paul the annual rate was $9 for semiprivate rooms. There was no extra charge for the enrollment of dependents, regardless of number. The hospital service plan paid the amount of the "discount" to the participating hospitals.

Both the St. Paul and New Orleans plans have been altered. The amount of care demanded by dependents was not excessive, but the rates charged proved inadequate to reimburse hospitals satisfactorily for the services rendered. On July 1, 1935, when the St. Paul plan was merged with the Minneapolis organization, an additional $1 per year (8 cents per month) was charged for partial coverage (25 per cent of the hospital bill) to dependents. At the same time the term dependent was defined to include only the subscriber's spouse and unmarried children living at home. The annual fee of $1 was not sufficient to reimburse the hospitals completely for the discounts to dependents, but the $10 per year was adequate for services to the subscriber and family. A substantial cash surplus has been accumulated from earnings and is held as reserve in case of emergency.

Effective January, 1937, a further change was made in the Minnesota plan. For a charge of $3 per year (25 cents per month) a subscriber's dependents will be entitled to discounts of 50 per cent on hospital bills. The New Orleans plan was also entirely revised on January first. It is referred to elsewhere in this article.

Partial Rates for Partial Coverage

Lack of experience and possibility of excessive use by dependents have led to the introduction of partial rates for partial coverage for subscribers' dependents. The subscriber's responsibility to pay a portion of the hospital bills for his dependents should minimize the tendency to seek care unnecessarily. The Cleveland plan provides semiprivate services to employed subscribers at $9 per year. A dependent may be enrolled for a subscription rate of $4.50 per year and be entitled to 50 per cent discount on the hospital services which the employed subscriber would receive without charge. The $4.50 is charged for each enrolled dependent regardless of number. The director of the Cleveland Hospital Service Association states that he has not concentrated on the sale of these dependent contracts.

More popular among employed subscribers are the partial coverage plans which have a maximum family rate regardless of the number of eligible subscribers. Such an arrangement has been in effect in Rochester, N. Y., since its beginning June, 1935. The rate for the employed subscriber is 65 cents per month or $7.80 per year. For an additional 35 cents per month one dependent may be enrolled, and for 30 cents more all other family members may be protected. Thus the maximum family rate is $15.60 per year. Dependents have

been entitled to 50 per cent discount on the services provided free to employed subscribers.

Arrangements similar in principle are in effect in the newly formed plan for hospital care in Chicago, where the monthly rates are 80 cents for employed subscriber, 35 cents for first dependent and 35 cents for all others. The maximum family rate is $18 per year. The coverage for dependents is one-half that for subscribers.

Some of the plans make a flat charge for dependent coverage, regardless of the size of family. The previously mentioned plan of $1 per year in the Minnesota plan is an example. In Kingsport, Tenn., a town of 15,000 population, upon payment of $3 per year per family (above the $9 charge for employed subscribers) dependents may be enrolled for one-third discount on the services provided to subscribers.

A unique plan of handling dependents is that of the Baylor University Hospital, Dallas, Tex., which charges a flat rate of $1 per month for the coverage of all dependents, regardless of number. This is in addition to 75 cents per month charged for employed subscribers. The dependents receive the same benefits as the employed subscriber, but must pay 50 per cent of the board and room rate for the accommodations occupied. Only a small number of the employed subscribers have taken advantage of the privilege to enroll their families.

Full Rates for Full Coverage

Full coverage plans for dependents are of various types. From the beginning, the plans in Sacramento, Houston, Dallas, San Antonio, New York, Newark and Durham have permitted subscribers to enroll their dependents at substantially the same rates and with the same benefits as applied to themselves. By this arrangement a subscription rate of $10 annually for an employed person would become $20, $30 or $40 for families of two, three or four persons respectively. This type of full coverage plan has not been popular and tends to be supplanted by a family rate plan with a maximum rate regardless of the number of dependents.

A sliding scale of subscription rates for large families has met with some approval. By these plans an employee might pay 75 cents per month for himself, 50 cents for the first dependent, 25 cents for each additional dependent with a maximum of approximately $2 or $2.50 regardless of size of the family. This principle has been applied in Bluefield and Charleston, W. Va., in Durham, N. C., and is being introduced in New Orleans. In the family-rate plan of Durham the dependent must pay for board and room during the first two days of hospitalization. In New Orleans the dependent must pay $1.50 daily toward the cost of board and room service.

Family rates for full coverage have recently been introduced by the Associated Hospital Service of New York City, the Hospital Service Association of New Jersey, the Hospital Savings Association of North Carolina, and the Western New York Hospital Service Association of Buffalo.

What New York Is Doing

The New York City plan provides for the enrollment of an employed subscriber at $10 per year, the first dependent at $8 per year and all other dependents at an additional amount of $6, making a total of $24 per family. Both the subscriber and the dependents receive full benefit in case of hospitalization. In the New York plan, family participation is limited to the pay roll deduction groups or those making payments through a responsible remitting agent. The plan was inaugurated on September 16, 1936, when 100,000 employees and 25,000 dependents were enrolled. On January 1, 1937, the membership had increased to 148,000 employed subscribers and 68,000 dependent subscribers.

The Hospital Savings Association of North Carolina enrolls employed subscribers for $7 per year, the first dependent for an additional $7 per year and all children under the ages of sixteen for $6 per year, making a total of $20 per family. The New Jersey plan which is similar to that of New York, has enrolled 13,067 employed persons and 4,831 dependents.

Each of the plans described or mentioned in this article (except the now discontinued automatic discounts) have been economically sound to the extent of paying the participating hospitals in full for services provided to subscribers and dependents. Consequently administrators are moving forward in the provision of full or partial coverage for entire families. Actuarial data as to utilization of service by employed subscribers and dependents may be obtained from the American Hospital Association.

Who Uses the Service Most?

Adult dependents require more service, on the average, than employed subscribers, mainly because most of the adult dependents are women. Children require on the average less service than adults, even when allowance is made for tonsil and adenoid cases and children's diseases, most of which are infectious and hence cared for in the home.

The dependents of pay roll deduction subscribers use less service than those enrolled through direct payment. Pay roll deduction groups appar-

ently are more apt to enroll their entire families and in this way to reduce adverse selection from personal preference as to participation. Partial coverage, as opposed to full coverage, tends to limit the amount of service which dependents request from the participating hospitals. Partial coverage also tends to limit the amount of care received by the employed subscribers.

Satisfactory control of family rate plans requires that dependents be limited to the subscriber's husband or wife and the unemployed children living in the home. Married children are not eligible to participate in any of such plans. In New York City dependent children may be enrolled from birth up to nineteen years. In Minnesota no age limits are established. In North Carolina the age limit is sixteen.

What provision can be made for the enrollment of an employed subscriber's dependent brothers, sisters or parents? The New York plan permits employed subscribers under the family rate also to enroll other dependents for full coverage upon the payment of the same rate as is charged the employee himself. This means that a subscriber already paying $24 per year for his immediate family may enroll parents or other dependents at the rate of $10 per year per person. This privilege is also extended for domestic servants of the household, provided they "live in."

Should Dependent Pay Their Way?

Should dependent services be self-supporting? That is to say, should the subscriptions received on behalf of dependent subscribers meet the costs incurred on behalf of dependents? One might argue that all groups of participants in an insurance plan should "pay their way." Obviously a hospital service plan must be self-supporting through subscriptions or otherwise.

But if the family be considered as one subscriber, it is sufficient to make sure that the family rate provides the cost of service. The "proportionate" subscription rate may be relatively high for the employed person and relatively low for the subscribers. Likewise the charges for a single person or a subscriber with one dependent may be proportionately higher than for large families. High rates for large families would prohibit participation by the very groups who need the service most. From the point of view of social usefulness, therefore, it appears justifiable to charge single persons and those with small families proportionately more for the services they receive than the members with many dependents.

What illnesses should be served for dependents? This question is often raised with respect to maternity coverage, gynecologic cases, tonsil and adenoid cases, venereal disease, mental cases and tuberculosis. It is the judgment of the administrators that there is more to be lost than gained by rigid exclusions of certain types of conditions. There is an active demand on the part of the general public for the inclusion of dependents in hospital service plans. It is administratively feasible to include dependents for coverage without financial risk to the plan or undue expense to the subscriber. The ideal arrangement is one in which members of self-supporting families may receive full coverage. The experience of the plans which are now offering these benefits may pave the way to a financial and satisfactory solution.

ENROLLMENT, JANUARY 1, 1937, IN NONPROFIT, FREE CHOICE HOSPITAL SERVICE PLANS WHICH INCLUDE DEPENDENT COVERAGE

Location	*Employed Subscribers*	*Dependents*
Sacramento Intercoast Hospitalization	9,217	(1) 4,609
New Orleans Hospital Service Association	13,378	(3) 26,298
Minnesota Hospital Service Assn.	33,043	(4) 35,172
Hospital Service Plan of N. J.	13,067	(1) 4,831
Associated Hosp. Service of N. Y.	147,947	(1) 68,246
Rochester Hospital Serv. Corp.	30,485	(2) 24,826
North Carolina Hospital Savings Assn.	12,057	(1) 7,427
Durham Hospital Care Association	12,300	(1) 12,700
Cleveland Hospital Service Association	38,620	(2) 4,965
Holston Valley Community Hosp., Kingsport, Tenn.	2,197	(3) 4,199
Norfolk Tidewater Hospital Service Assn.	3,432	(1) 1,826
Bluefield Associated Hospitals of Bluefield	3,500	(1) 7,000
Charleston Hospital Service, Inc.	2,961	(1) 4,940

(1) Full coverage or nearly so; (2) half coverage; (3) one-third coverage; (4) one-fourth coverage.

Courting Trouble

A common administrative practice, but one which psychologically is a mistake, may occasionally be observed when administrators and department heads invite complaints by the personnel during the course of their rounds in the hospital.

Encouraging complaints is not the best way to deal with possible administrative shortcomings. It is human nature always to be grasping for more than one is getting. Food, for example, means more to most people than any other of the comforts of life, so that would naturally be the first thing to come to the mind of an employee if he is asked whether he has any complaints. If someone were to go around with pencil and paper and ask how many are dissatisfied with their salaries, quarters, laundry or almost any other perquisite which they enjoy as part of their compensation, one would obtain many criticisms. It is never wise to make people food conscious or salary conscious.

The good administrator should always be open to criticism. He should indeed welcome it and be glad to examine every specific complaint. But much better results can be obtained throughout the hospital if complaints are made spontaneously, in private, rather than by request or public demonstration.—*Lenna F. Cooper, Dietitian, Montefiore Hospital, New York City.*

Balm for the Burned

IN THE pediatric department of the Cincinnati General Hospital, improved and modern facilities for the care and treatment of burned infants and children have been provided by the completion of a new burn room, planned, designed and constructed under the supervision of Dr. H. Jerry Lavender, attending dermatologist. The set-up was made possible through the generosity of a group of anonymous donors.

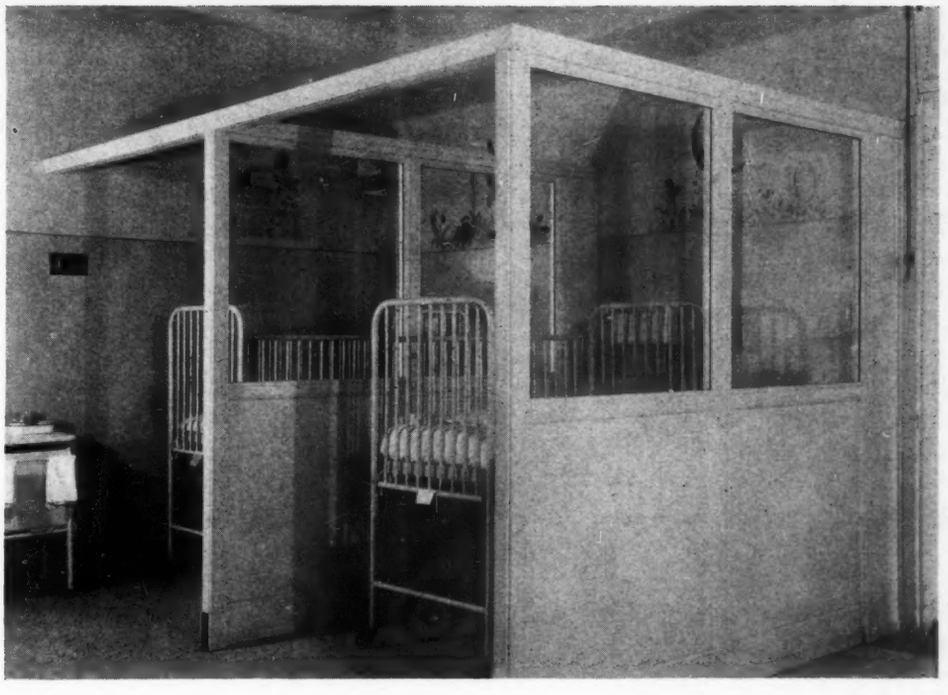
This room, which is adjacent to and connected with the burn ward, contains five tubs, three large and two small. The tubs are raised a foot from the floor to facilitate the handling of the patients. Each tub, which is a separate unit, has canvas hammocks or rests, adjustable in height, connected to rubber hooks at the upper edge of the large tubs and to special frames built on the edge of the small ones. The water inlet is controlled by thermostats which make for a uniform temperature. Modern spray fixtures may be attached and put into play within a few seconds.

In a large cabinet are kept medicines, linens and assorted rubber pillows and rings. A portable surgical cart contains first aid materials, sterile dressings and instruments and special apparatus for intravenous injections and blood transfusions. A large electric drier also has its place. A washbasin and a rubber padded portable dressing table complete the necessary physical set-up.

To add to the psychologic value, the tubs are of different pastel shades, the tiles surrounding them are uniformly light gray, while the floor tiles have several colors in block or inlay formation. Two huge ceiling light fixtures and a small one over the washbasin contain an assortment of colors which blend pleasingly. A grayish rose marble lines the walls to a height of six feet.

An especially constructed electric kaleidoscope, probably the only one of its kind, projects varied and constantly assorted colored designs and patterns on the upper walls or the ceiling. This has proved a help in preventing the child from be-

The complete set-up of the "burn" room at Cincinnati General Hospital is shown on the opposite page. Left, a close-up showing patients in the large tubs and the hook or hammock arrangement. Below, a section of the "burn" ward, with its isolation cubicles.



coming too self-centered. Water toys — ships, ducks, fish — help chase monotony and gloom. Cut-outs of different birds and animals, also of Mickey and Minnie Mouse antics are pasted just above the marble limits.

The ward accommodates eleven beds and cribs and has two isolation cubicles. The room is finished in white and cream, while the walls depict many Mother Goose characters which are done in colored paints.

The burned child is sent directly to the burn ward and placed in an isolation cubicle. He remains so isolated until the acute contagious and infectious diseases common to childhood are ruled out. However, the treatment of the child begins immediately. The general condition is noted, and the type and extent of the burn determined. The patient is made comfortable and treatment instituted to combat shock.

Blood donors are arranged and blood obtained as soon as possible, as transfusions are done early in most cases. To wait until an emergency or crisis arises may be too late. Intravenous medications are started early and are very important.

As soon as the shock stage is ended the patient is tubbed in warm soap solutions and a débridement, or cleaning up of the involved areas and removal of superficial burned tissues, is done. Applications to the burned wounds are then applied to meet the individual case.

From this point on, the child gets its tub periods daily. They range in length from a few minutes to several hours, the tolerance of the patient being the guiding point. The toxic and septic stages are met with appropriate measures and deformities are prevented whenever possible.

Next Call for Attendants

By FRED G. CARTER, M.D.

DURING the economic upheaval hospitals were able to employ graduate nurses at very low salaries and there was little need for attendants. Recently, however, with the advent of the eight-hour day, the economic improvement and the effort to raise nursing educational standards there has arisen apprehension lest soon there may not be enough nurses. Administrators therefore are discussing ways to staff their institutions at prices they can afford to pay and the question of attendants has again come to the front.

Estimates of the nursing load that might be carried by attendants vary from 20 to 80 per cent. Regardless of these estimates there are many ways in which the attendant should be used, and it seems to me that soon her place will be definitely fixed in the hospital picture. There will be extremes in the direction of over use and under use of these workers, of course, but time will iron out such discrepancies.

Christ Hospital, Cincinnati, has been using attendants since 1921. During that time over 250 have appeared on the pay roll. At present seventeen are employed. For a number of years it was the practice to engage twenty-five to thirty of these young women each summer for vacation relief in the nursing department. These were in addition to the regular quota.

Handle Largely Routine Work

In general, the work assigned to them is of a routine nature. They make up empty beds, dust furniture, help to keep rooms in order, carry meals to patients, look after flowers, make up beds of convalescents, carry drinking water to patients, keep linen closets in order, count and stack linens, help to keep the nurses' stations looking neat, serve nourishments between meals, keep utility rooms and equipment clean and orderly, run errands.

They are given a certain amount of training in the beginning in the making of beds, preparing and arranging flowers, serving meals and other tasks. Short conferences are held weekly for constructive criticism of their work. No effort is made to give them a well rounded experience with different types of patients. They are assigned to a given station and for the most part remain there throughout their periods of employment. They may be transferred to suit the convenience and needs of the hospital. Some have worked on the same stations for a number of years.

The duties listed could undoubtedly be considerably enlarged without prejudice to the interests of patients. Some claim that the services of attendants should stop at the bedside of the patient. Others hold that their field of usefulness is unnecessarily curtailed by such restrictions. In the smaller rural hospitals in particular, where graduate nurses are unobtainable, the field of the attendant has been widened to include nearly all kinds of service to the patient. It seems that many nursing procedures do not call for trained clinical judgment. These might well be assigned to attendants, trained for the work largely by apprenticeship methods.

Employees—Not Student Nurses

So far as I know, none of our attendants have gone into the field of practical nursing. Whether or not they will do so depends largely upon the attitude of the hospital. They are looked upon as employees, not as students. No effort in the direction of establishing regular courses for them is made. This does not mean that definite programs of instruction are not formulated for them as for workers in the housekeeping and dietary departments. It does mean that regular classes are not enrolled and graduated at the end of prescribed periods of training and sent into the field.

The hospital employs only enough attendants for its needs and provides enough instruction to enable them to carry out their work assignments in this hospital. The number employed has no reference to the development of a corps of workers to go out into the community or into other hospitals. No diplomas or certificates are given. I believe that their daily contact with nurses and their observation of the grave responsibilities which nurses may carry make them conscious of their limitations and act as deterrents in keeping them from going into practical nursing.

After fifteen consecutive years of experience with nurse aids, we find that they have made a permanent place for themselves in this hospital. Nursing supervisors are uniformly enthusiastic about their work. Letters from grateful patients frequently refer specifically to the services of these employees. Where large groups of student nurses are rotated through the different departments the attendants lend a certain amount of stability to the departments.

Administrative Case Histories

By LEWIS E. JARRETT, M.D.

LACK of understanding of mutual problems and lack of cooperation between department heads and members of the personnel frequently cause discord in an institution. When this lack of esprit de corps exists it is likely to be reflected in the care of patients.

Frequently members of the visiting staff contribute to the problems of the administrator, not through lack of interest but because they have not been impressed with many necessary details of hospital procedure. Then, too, members of the visiting staff who receive no salary from the hospital feel that their suggestions should be adopted without question even though the administrator cannot justify them from a budgetary standpoint. It is essential that the hospital superintendent weigh the evidence fairly in each case and then use his tact and judgment in reaching a decision.

The administrator must be ever alert in planning for and organizing his institution, anticipating problems, so that a spirit of service may permeate the atmosphere, bringing full cooperation from each employee and developing loyalty toward the sick.

Now we should like to present for consideration a few problems that daily arise in a hospital.

1. *Balancing the Budget*

Of the many problems constantly harassing the hospital administrator none has more importance than the budget. It is assumed that every hospital has a budget for it is only by this means that income and expenditure can be accurately estimated. The budget is the problem of the hospital administrator. He must, of course, have advice from his associates and the approval of his board, but it is ultimately his responsibility.

We must consider hospital management as a business. It is true that this business is different from most others for it sells service rather than commodities. It is also true that this service is a peculiar and highly specialized one, different from most other forms of service because hospital employees are constantly dealing with mentally upset persons, persons not necessarily organically abnormal but at least functionally so. The sick are fearful and unfortunately members of their families are usually more so. The administrator must recognize these facts and efficiently manage his institution from the standpoint of the service rendered, and must also live within his income.

On admission the patient should be made to feel that the institution has been established for service and that this fact is foremost in the minds of the personnel. He will then be less apprehensive. Incidentally, however, he or his relative must realize that someone must pay for the service rendered him. If he is financially able he must pay; if he is financially unable to pay he must be impressed with the fact that some person or agency must pay his bill.

After an introduction between the patient and the hospital employee at which time the patient is made to feel at ease, a financial problem presents itself. The proper person should be designated to meet the patient or his family and attempt to consumate a sound financial agreement. At this time it is rather easy to come to terms which will be to the mutual satisfaction of all parties. This is not possible, however, several days later or at the time of the patient's discharge.

Each hospital should have a contract form, a copy of which should be filled in and signed by each patient or by a responsible person on admission. This should minutely describe the details of the contract so that there may be no misunderstanding. The question may arise as to whether a prominent citizen should be forced to sign such an agreement, and the answer should be unequivocally "yes." This person has probably gained his prestige by performing his duties in a businesslike manner and will look with favor upon a hospital that handles its accounts similarly.

At the time of discharge the patient should have cared for his account as indicated in the signed contract. If he has been unable to do this a new contract should be signed. After the patient leaves the hospital this account should be followed diligently so that the patient may realize that he must fulfill his agreement.

It is wise, particularly in a larger institution,

to employ a person whose sole duty is to plan a systematic follow-up of unpaid accounts. This person's duty of course will not end in writing letters to former patients. He will also contact insurance companies and lawyers who might be involved in accident cases and carefully scan each day court records that might involve former patients. He must also keep a calendar in order that the Statute of Limitations will not invalidate a number of these accounts.

If a hospital is able to collect its anticipated income it should be able to control its expenditure and balance its budget.

2. *Autopsies*

It has long been recognized that the practice of scientific medicine must be augmented by postmortem findings. This is particularly true in hospitals where an adequate pathologic department is maintained for the purpose of giving the staff members aid in surgical as well as anatomical pathology. So important is this question that a number of national organizations require a definite percentage of autopsies in relation to deaths before recognition is given that institution. While a number of hospitals do not comply with these arbitrary figures it is doubtful to many if the required percentage is high enough to get a fair cross section of the type of work being performed in that institution.

The question might be asked to whom does this autopsy problem belong and the answer could readily be given, to each employee in the institution in his daily tasks, who must give the patient every consideration possible and thus impress the family with the feeling that the patient is receiving every attention necessary.

Let us discuss briefly a patient who has been admitted to the hospital with a diagnosis of lobar pneumonia. The patient is extremely ill and after an examination it is felt that the case will prove fatal. At the time of admission the groundwork for obtaining an autopsy should be laid. It is not meant to imply that such a thought should be transmitted to the patient or a relative, but by each employee displaying the proper spirit, the family will be made to feel that a scientific and friendly atmosphere prevails.

After the patient is transferred to the ward this same consideration of the patient and his relatives must be continued. The family should be constantly informed of any change in the patient's condition and at the time of death should meet the physician who has had most dealings with the relatives. With a tactful presentation of the advantages of an autopsy there should follow in the majority of cases a favorable reaction from those involved.

A further consideration which is frequently overlooked is full cooperation with the funeral directors. The physician has the confidence of the patient and the family while the patient lives, and it is natural at the time of death for the family's confidence to change to their mortician and if there has been thorough cooperation the mortician involved can be of inestimable value. Administrators should consider this problem carefully and see to it that unnecessary delays are eliminated and that the pathologist does his work quickly and efficiently to reduce to a minimum any excess work on the part of the undertaker.

Authorization for postmortem examination is often a bone of contention. The members of the staff being enthusiastic about a particular case are too prone to obtain permission from any relative that happens to be present. Here the administrator must step in and decide on each case for it is his responsibility and it will be his institution that will feel the effects of legal proceedings following unauthorized autopsies.

The nearest living relative is naturally the person to issue this permission. There are, however, times when this person is not available. It is usually felt in this case that a telegram from the nearest relative is sufficient authorization, provided the sender of the telegram signs the original. In the case of husband and wife, when there is separation, but not divorce, the living member should be contacted. If this is impossible it is well to assume that the next nearest kin is allowed to authorize the examination. In many cases the coroner can be prevailed upon to lend his cooperation and in still others when no member of the family can be located, the permission of the person assuming charge of the body would be proper.

In obtaining a signed permission from any of the above mentioned, care must be exercised to ensure that the family thoroughly understands the request. The administrator must not allow the attitude to develop that all that is necessary is to obtain a signature. He must see to it that the feelings of the relatives are considered in obtaining a permit and that a thorough explanation of the contemplated examination is made. In the end this strict honesty will influence the people of the community and ultimately will be of value to the hospital.

It must be kept in mind that there is no happening in a hospital that is fraught with more chance of legal repercussions than an autopsy illegally performed.

3. *The House Staff*

Hospitals that maintain training schools have sometimes exploited pupil nurses to the advantage of the hospital. Not only have they depended on these pupil nurses for general nursing service, but they have allowed them to "special" a private patient for which the hospital received fees. This is obviously unfair to the pupil nurses and to the graduate nurses.

A similar problem facing hospital administrators is the exploitation of the members of the house staff. These young physicians are serving their final years in medical training so as to fit themselves for the practice of their chosen profession. They have, therefore, a right to expect that there will be planned for them an orderly, systematized and supervised routine of instruction.

How can a hospital exploit an intern? By sending him to a clinical pathologic laboratory to perform the work of a technician with no supervision; by assigning him to anesthesia to do his work without control or instruction; by assigning him to the radiology department and using him as a technician. In all of these cases and many more the administrator has seized an opportunity to balance his budget at the expense of the intern, and to the detriment of good hospital practice.

Then, too, we must guard against hospitals using their house staff, in competition with the private practitioners. An intern in his first year is always ready and willing to suture wounds in the emergency ward and the hospital only too frequently is agreeable to this procedure, charging a larger fee than ordinarily is charged and considering itself lucky to increase its income. This state of affairs should not be tolerated by the administrator who should insist that a member of the visiting staff be called and if the patient proves able to pay a fee the physician should collect for his services.

Another problem in this regard is the assignment of duties to a member of the house staff by physicians who have private patients in the institution. Frequently a general practitioner has contract work with large commercial firms or insurance companies. He is not capable of performing surgery and he accepts these cases knowing his limitations. He then in turn attempts to shift the responsibility of treatment to the resident on the service with the statement, "I shall be present and shall supervise the work."

The administrator should be constantly on the alert to prevent such happenings as these and although he may gain disfavor with referring physicians he will be satisfied that he has done his duty to the patient and to the staff.

Nurse Quality, Not Quantity, Is Problem

SECURING suitable nursing power is a greater problem in most hospitals than securing an adequate number of nurses. This conclusion was reached by the joint committee to study nursing problems of the New York State Hospital Association and the New York State Nurses Association, after polling 429 hospitals in the state with questionnaires regarding the conflicting reports on the shortage of nurses and the advisability of changes in the present Nurse Practice Act.

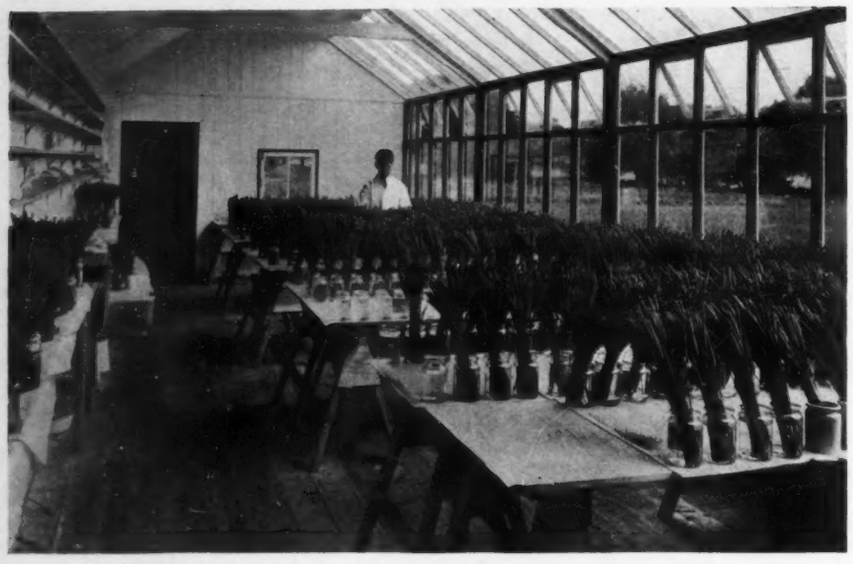
Nurse shortages, it was revealed, were geographical. Difficulty in securing general duty nurses was noticeable about Rochester, Schenectady, New York City and Brooklyn. Little or no difficulty in this respect was felt about Watertown, Ogdensburg, Placid, Plattsburg, Utica and Poughkeepsie. The remainder of the state had moderate difficulty. Salaries ranged from $40 to $120 a month with maintenance, and those districts having shortages also tended to be offering less than $70.

Nurses who live outside of the hospital, in two-thirds of the upstate and two-fifths of the downstate hospitals, are allowed nothing for outside maintenance. In the remainder, the allowance varies from $5 to $35 a month, in only 35 per cent of the cases is the allowance over $21. However, those hospitals that do not provide rooms for nurses seemed to have less difficulty in securing nurses.

No vacations with pay are allowed in 8 per cent of the hospitals. Fifty-seven per cent allow two weeks or less. Four weeks were given more commonly in New York City than in upstate hospitals. Salary increases are given in about 20 per cent of the hospitals, but the amount of increase is extremely small.

Duty hours range from forty-five to eighty a week. General duty nurses are expected to work fifty hours a week, or more, on day duty in 77 per cent of the upstate hospitals and 87 per cent of the downstate.

What Others Are Doing



For Growing Pollen

For twenty-five years the inoculation department of St. Mary's Hospital, London, England, has been collecting and studying pollen, and recently it came to the conclusion that it must have a building designed for the purpose of pollen development set down among the grass. As a result a pollenarium has been erected, where the study of grass pollen and its collection in bulk are carried on in an effort to meet the growing need for desensitization against hay fever. Thirty-one pounds of good dry grass pollen had been collected by August of last year. The photograph is of the east developing room, and shows heads of Timothy grass developing for the pollen crop.

Duties of Night Nurses Outlined at Mount Sinai

A booklet of special information for student night nurses published and used by the Mount Sinai Hospital school of nursing, New York City, has just been revised. This detailed resumé of duties leaves little to chance. Among the many interesting paragraphs in the pamphlet are two of especial interest. The first refers to the responsibilities of the night nurse as follows:

Special responsibility rests on the night nurse. She is expected to maintain order and quiet in her ward, to give the best possible nursing care and attention to patients and as far as possible to understand their condition and treatment. The comfort and welfare of the patient is the first consideration. Other matters are important but secondary.

The protection of patients is the subject of the second paragraph. "Nurses are never to leave the ward alone. If necessary for the senior nurse to be out of the ward while working in the kitchen or back rooms, she must leave the junior night nurse or orderly to watch the patients in the ward. If another nurse is needed, call the head nurse and ask for help."

When It's Time to Paint the Roof

Roof decks deserve the best treatment possible, frequent painting, for example. Instead of giving them another coat of red next time, or even green, see how they respond to a generous application of high grade aluminum paint. Captain Harry H. Warfield, superintendent of St. John's Riverside Hospital, Yonkers, N. Y., is ready to attest to the fact that they will live longer and more useful lives in consequence. Aluminum reduces expansion and contraction, he has found, and prevents seams from breaking with resultant erosion. Another point in its favor is that it keeps the temperature down — is actually cooler.

If there is any aluminum paint left after finishing the roof, try mixing with a small amount of color for use on beds or furniture. Also added to a soft green or blue it gives a silvery effect which is extremely attractive. Furthermore, it seems to prolong the life of the other paint.

Pamphlets Explain Services and Answer Questions

Two pamphlets have been issued recently by Baylor University Hospital, Dallas, Tex., in its campaign to educate and create good will among its public.

"My Operation at Baylor" is a series of letters written by a wife to her husband, in which the hospital is compared favorably with an expensive hotel; its services, equipment, supplies, and charities are all outlined through the sympathetic questioning and sightseeing tours of this patient. Her last letter to her husband suggests that he enlarge his final check to the hospital enough to help give some child a chance to health. The pamphlet is illustrated fully in a chronological sequence; a picture of the laboratory, of the operating room, of a nurse with breakfast, of the linen room and its sheets, of convalescents in the solarium, and of the children's department.

"Protect Precious Lives," the second pamphlet, is issued by the maternity division of the hospital. It is a detailed explanation of the obstetric service and of its rules. The reasons for nonadmittance of relatives to the delivery room, for not permitting children in the maternity division, for visiting hours, are all given. The booklet closes with a discussion of the cost and payment of such cost as handled by Baylor.

Probably you can think of one or more practical ways to save time or increase efficiency. The Modern Hospital will welcome your ideas to put before other hospitals

Cooperation—A Key to Public Support

To maintain voluntary hospitals at their present standards we must fight. The best way to do it is to seek public support by well planned joint effort

By HOMER WICKENDEN

MANY people believe that the provision of hospital care should rest entirely on the government. They cite the public schools to illustrate that it is possible to set up a perfectly satisfactory system of "public medicine and hospitals." Our communist friends in particular feel that all medical service should be "free."

But if you and I take the position that our hospital problems should not be "dumped" on the government and that we should fight to keep our hospitals as nongovernment, nonprofit, voluntary institutions, we must have some definite grounds for this position when we undertake to persuade our friends to fight with us.

I believe that in spite of the able administration in some of our cities and counties, government hospital service, no matter how well managed, is still subject to red tape, inflexibility, constant pressure from the taxpayer to reduce the budget, competition between departments sharing in the government budget and some politics.

What is a voluntary hospital anyway and why does the word voluntary have a greater significance to us than the word proprietary or the word municipal, when applied to hospitals?

A voluntary hospital is not merely an institution built of brick and mortar. It is essentially a public service, built up in many instances by our grandfathers and fathers through great sacrifices and struggle, sometimes by churches, sometimes by religious or fraternal orders. It is not strange then that the voluntary hospital is one of the most cherished features of our community life.

However, the sentiment attached to it is not in itself any reason why this public service should not be turned over to the government.

The real reason is that these hospitals have something in their form of organization and in their spirit which should be preserved but will not be preserved if they are under government control. They are managed by unpaid trustees who work neither for profit nor for political favor. They are staffed by unpaid physicians who constantly strive through cooperation, and at the same time friendly competition, to give the patient the best that medicine has to offer. Many special features of these hospitals are carried out by voluntary women's committees, some concerning themselves with the development of medical social service, some with better nursing, some with library work and occupational therapy, some with the provision of linens and bandages, and some with the provision of convalescent care—all making their contribution to the humane and social aspects of the care of the sick. In addition there are thousands of friends of these institutions who stand ready to volunteer their help in time of need.

In other words, in these voluntary hospitals is a cohesive force, a spiritual devotion to the public good, seldom found in all these manifestations in government institutions.

And what we propose to do with these voluntary hospitals and all this voluntary effort is indicative of our social attitude. In a sense these voluntary hospitals are symbols of our social philosophy.

No Rights Respected

In the *New York Herald Tribune* recently Mark Sullivan wrote: "The most conspicuous fact in the world today is the rapid spread of two conceptions of society and government, in both of which the fundamental characteristic is compulsion of the individual to submit to the government—dictation by the government in every area of life in which government chooses to assert autocratic power. In both Fascism and Communism the fundamental rule is that the individual has no freedom of choice, no rights which the government need respect. The aim is the 'authoritarian state' and the 'totalitarian state.' The idea is uniformity — uniformity and, therefore, conformity.

"The most solemn duty of Americans is to safeguard our own country from infection by this rapidly spreading conception of society and government. This infection, like those of disease, gets its foothold insidiously and becomes a contagion before the victims are aware. The time to stop it is at the first invasion. That 'the price of liberty is eternal vigilance' is an American axiom."

In America, I believe that if with earnestness of purpose we undertake to remedy our social ills on a voluntary and essentially democratic basis we shall not only defeat the trends toward Fascism or Communism, but our people will be much better off in the end. And at least one opportunity for doing this is presented to the trustees and friends of our hospitals.

Now that times are improving, someone may say "Is it really going to be a fight to maintain these hospitals as voluntary institutions and up to their present high standards?" The answer is "Yes, it is going to be a fight." And there are many reasons for believing so.

Everyone recognizes a growing feeling on the part of many people that "the government should do it all." This point of view is not held merely by people on relief. Sometimes it is stressed by the wealthy contributor who is disgruntled over his heavy tax bill.

There is the reduced financial ability of some hospital trustees to carry the burdens they formerly carried.

More Goes Out — Less Comes in

Hospital costs are mounting faster than revenues. A recent study by the United Hospital Fund showed that whereas revenues from patients in twenty-one hospitals in New York City had increased $450,000 during the first six months of 1936, over the same months in 1935; the cost of caring for patients had risen by $650,000 during the same period, leaving these hospitals $200,000 worse off.

During the depression, where government aid has been made available, the amount of such aid has increased. In New York City the government was paying the voluntary hospitals $2,200,000 in 1930, whereas today the government is paying more than $4,000,000 annually. As the depression lifts it is not going to be easy to see this help reduced or withdrawn.

In the past, hospitals have frequently depended on wealthy patrons. But it is apparent to all of us that the New Deal is not destined to create many great fortunes, and already inheritance taxes have deprived hospitals of some bequests they would otherwise have received.

Even though a hospital has a substantial endowment or received large legacies, the interest rates on invested funds are definitely lower. And with the prospect of an inflationary rise in prices, such interest rates as we have will seem smaller than ever.

In the face of the economic pressure of relatively less hospital income, we shall have increased wages for all classes of help, competition with social security benefits, constantly rising standards of nursing, and constant requests for the equipment needed to keep step with rapidly expanding medical science.

Gifts Always Needed

Even though prepayment plans for hospital care develop to the point where hospitals have no deficits for bed patients, there would still be need for voluntary gifts for teaching, research, development of medical social service, out-patient service and the replacement of scientific equipment. Pioneering in new fields will always have to be done by voluntary hospitals.

If it is going to be a fight to maintain voluntary hospitals under these circumstances, how had we best carry on that fight?

Some people in recent years have ventured to suggest that there is a painless way out of the situation through the organization of legalized lotteries. My feeling about this is that, regardless of the fact that it takes 75 per cent of the receipts to run the lottery and most of the money comes out of the pockets of the poor, money raised in this way with no effort on the part of hospitals soon would demoralize the hospitals. It is the old story of "easy come, easy go."

Some have suggested that hospitals should fight their battles individually and let those which can, survive. But it seems to me that if biology has anything to teach us it is that survival does not depend on the fitness of any individual but on the ability of individuals, be they people or hospitals, to cooperate in the mastery of their environment. Cooperative effort is the foundation of group protection and for hospitals this is particularly true.

Strangely enough, cooperative effort in a fight for public support for voluntary institutions provides us with new tools with which to work, new implements and new techniques to help solve our problems. This is particularly true in a large city. These new tools are seldom available to an individual hospital.

There are five new tools that are put in our hands by this cooperative effort to seek public support:

1. The pooled services of an army of trustees,

women's committees and friends, under a central leadership and direction.
2. The combined resources of the entire community for public education.
3. The proffered services of all organizations, agencies and facilities for fund raising.
4. The opportunity for creating great "occasions" around which public interest and enthusiasm can be aroused.
5. A channel through which huge corporate interests and foundations can be interested and persuaded to give to community enterprise.

I can best illustrate the use of these new tools by reference to some of our experiences.

With regard to the first tool, prior to the reorganization of the United Hospital Fund by our new president, David H. McAlpin Pyle, the Fund had carried on for many years a small appeal in which only a handful of people did any work and the trustees of the member hospitals took almost no interest. There was little public enthusiasm for the Fund and with the depression the organization was on the verge of dying out. On a thoroughly cooperative basis under the reorganization, the Fund has at its command the services and interest of some 1,500 trustees; 3,500 women, and nearly 1,000 friends who are willing to help. Our recent campaign showed a total enlistment of nearly 6,000 individuals—more than were ever enlisted in any similar effort in New York.

Fifty Pages of News Space

With regard to the second tool, it proved vastly easier to command the educational resources of the community for thirty-eight hospitals than for any one hospital. In our recent campaign the newspapers gave us over fifty pages of news space; newspaper advertising space equivalent to twenty-three pages was donated; 152 billboards were put at our disposal, and 8,000 car cards placed free. Little difficulty was experienced in placing a movie describing the work of the hospitals in seventy-nine theatres. Radio time was relatively easy to secure and more than fifty-one broadcasts were made. It is little wonder then that everyone in the city knew of the United Hospital Campaign and watched its progress.

The third tool—the proffered services of organizations for fund raising — is well illustrated in the fact that more than fifteen able young men were loaned by various corporations for full-time service in campaign organization for a period of nearly three months.

The fourth tool—the opportunity for creating great "occasions" around which public enthusiasm and interest can be built up—is very important and seldom thought of. When our campaign was first announced, the announcement grew out of a meeting of forty of New York's leading citizens at the office of J. P. Morgan & Co. At the first rally meeting of hospital trustees at the chamber of commerce at which 300 were present the principal address by the president of New York's largest bank attracted wide interest and newspaper comment. The opening dinner of the campaign not only brought together 1,500 enthusiastic workers, and created an eagerness to tackle the job, but made the basis for front page publicity in the newspaper the next day.

Central Fund Makes Strong Appeal

The advantage of the fifth tool is so obvious it needs little enlargement. As is well illustrated in your own Chicago Fund, corporations and foundations will give generously to a group of institutions or hospitals, when they will give almost nothing to these organizations individually. Furthermore, a central fund makes a strong appeal to thousands of individuals who have no connection with any particular hospital.

The use of these tools which cooperative effort offers brings definite rewards. Some benefits are indirect but none the less real.

The first great benefit is of course a much larger sum available for hospital support. Under the old letter appeal method we averaged something like $500,000 whereas last year by cooperative methods in which trustees, women's committees and friends did personal work, we raised $1,800,000 and this year it will probably reach $2,200,000. This sum is over and above the amount raised by hospitals individually and by the Jewish Federation which carried on its appeal at almost the same time as the Fund.

There is no doubt but that this method which arouses such widespread public interest results in many bequests and legacies for hospital purposes —both to hospitals individually and to the central organizations. In London King Edward's Fund has accumulated over $20,000,000 in endowment for hospital purposes.

One of the most important by-products of joint money raising is that joint thinking and planning are necessary to make an intelligent distribution of available funds. If study indicates the need of hospital facilities in one district and the lack of resources there, joint planning and distribution make possible allocation of the needed funds to that district. This kind of a democratic process, because it puts all the cards on the table, goes far toward the elimination of petty jealousies and the development of the cooperative spirit.

Another by-product closely related to proper distribution is uniform accounting and uniform reporting. This development is not one which can be worked out over night. In New York we have been working at it hard for seven years and still have much ground to cover. But what has been accomplished has been worth while.

From the standpoint of the service to patients this joint effort tends to weave all hospital services and functions into one community program. Until the women's division of the United Hospital Fund was formed a year and a half ago, there was no channel through which women's activities in the hospitals of New York could be represented in the community planning. The women's activities in medical social service, convalescence, occupational therapy, were previously considered as side issues. Today, because of their participation both in the raising and distribution of the funds (last year they received $375,000 of the funds raised) there is much greater appreciation of the work they do on the part of the trustees of the hospitals and a much greater support of the United Hospital Fund by the women. Without this integration of the women's work into the community program, the Fund would be without the enthusiastic and active work of 3,500 women. Can anything be more valuable to a community than the missionary work which so large a group of loyal women can do?

Hospitals in the past, erroneously, I believe, have not considered themselves, and have not been considered a real part of the social machinery of the community. They have been prone to look on themselves as big business institutions for the care of the sick with only casual relationships to the social service agencies of the city. From a community viewpoint neither group can succeed without the other—and happily the work which is done in raising a large fund and the thinking which is done by the workers lead to a closer working relationship between those dealing with health and those dealing with other social needs.

Still another by-product of joint seeking for public support is the greater willingness of hospitals to participate in joint studies and joint enterprises. There is no doubt but that the success we have had in carrying out the hospital survey for New York on so large a scale, covering 856 institutions and agencies for the care of the sick in the metropolitan area, particularly the economic study which is nearly completed, is due to the prestige of the United Hospital Fund which sponsored the survey. Only one voluntary hospital in the city declined to make available to the survey committee its confidential financial figures.

One more benefit which joint effort brings is this: it gives a logical basis on which cooperation with the medical profession may be developed. The allocation of such large sums of money as are raised in a joint appeal for public support has a definite bearing on what the medical profession can do in caring for the sick. It is therefore a problem on which the best medical advice should be sought. This is particularly true of funds for research, teaching or the advancement of medical science.[1]

[1]Read at the first annual dinner of the Hospital Council of Chicago, January 12, 1937.

Care for the Mentally Ill

One-half of all illness today is attributed to mental conditions. The general hospital with no provisions for the care of this type of patient is overlooking an opportunity of rendering greater service to the community it serves. Many communities cannot support a specialized hospital for mental patients. If the general hospital cannot care for them, the patient must be sent to a distant city and usually to a place whose name definitely signifies mental illness. No family likes to have an ill member away from home nor does it like the stigma attached by most people to mental illness. If care is provided by a general hospital, the true cause of the illness cannot be surmised and need only be known by friends and relatives in whom the family confides.

Proper care of psychopathic patients definitely requires a special department. This should be no more difficult to provide than the special unit for obstetrics, pediatrics and contagious diseases. Now when so many hospitals have only 50 to 60 per cent occupancy and there is a great demand for the care of mentally ill patients, it might be worth the director's time to study his physical plant and organization carefully with the view of converting some of the unoccupied space into a psychiatric unit. This has been done in some hospitals with gratifying results.—*Lucius R. Wilson, M.D., John Sealy Hospital, Galveston, Tex.*

Magazine Medicine

Library services in hospitals have grown in importance and popularity during the past decade and the work is usually carried on by volunteers from various groups of interested women. Not only psychiatrists but most physicians now recognize the value of "reading to forget" in the treatment of patients. A gripping detective or mystery story will offset the torment of a tonsillitis and the salty breeze of a sea yarn will even distract an arthritic. Magazines also serve a useful purpose both in waiting rooms and wards. In one hospital, in addition to the usual sources of contribution, unclaimed magazines are obtained by an arrangement with the postmaster. The same courtesy is probably available in most communities.—*Basil C. MacLean, M.D., Director, Strong Memorial Hospital, Rochester, N. Y.*

High on the crest of a hill stands the new home for the nurses and staff of Vassar Brothers Hospital, looking west toward the broad Hudson. In the future wings will be added to the building, which is now of twenty-four-bed capacity.

A Hilltop Home

THERE is a sense of space and beauty without as well as within the walls of the Mary T. Tower Memorial Home, for the broad Hudson flows past its back stoop and its front door opens on the crest of a pleasingly landscaped hill.

Early American in appearance, with its square lines, gabled roof and constant symmetry, the new home for the nurses and staff of Vassar Brothers Hospital, Poughkeepsie, N. Y., is three stories and an attic high at the crest of the hill, and drops to include a deep basement at the back. York and Sawyer, New York City architects, achieved external decorativeness through the use of solid white shutters and fanlights on the first floor windows and white slatted shutters at all other windows, an effective contrast to the red brick walls and slate roof.

Tasteful, harmonizing maple furniture is used throughout the first floor, and lighting fixtures and lamps, especially designed for the home, give unity to the various rooms on this floor.

The side walls of the lobby and of the lounge, which is directly behind it, are finished in five-ply veneer construction panels of selected American maple. The library, to the left of the lounge, has paneling and shelving of selected quarter sawed American white oak. All of this woodwork is given the same treatment—a first coat of wood filler to bring out the beauty of the grain, a coat of stain sealer and a coat of prepared wax.

Both library and lounge have fireplaces with electric outlets on their mantels for electric clocks. A concealed panel beside the fireplace in the lounge provides for the storage of wood. In the library concealed panels are used to provide storage space for periodicals and other printed matter, underneath the bookshelves.

The lounge was purposely built smaller than is customary, on the theory that small reception rooms and a medium size lounge are more to be desired than a large central lounge or living room. As a result it measures 20 by 28 feet, and two small reception rooms, a retiring room for women guests, and a fully equipped kitchenette for use on social occasions are included on the floor. Two suites for supervisors complete the main floor.

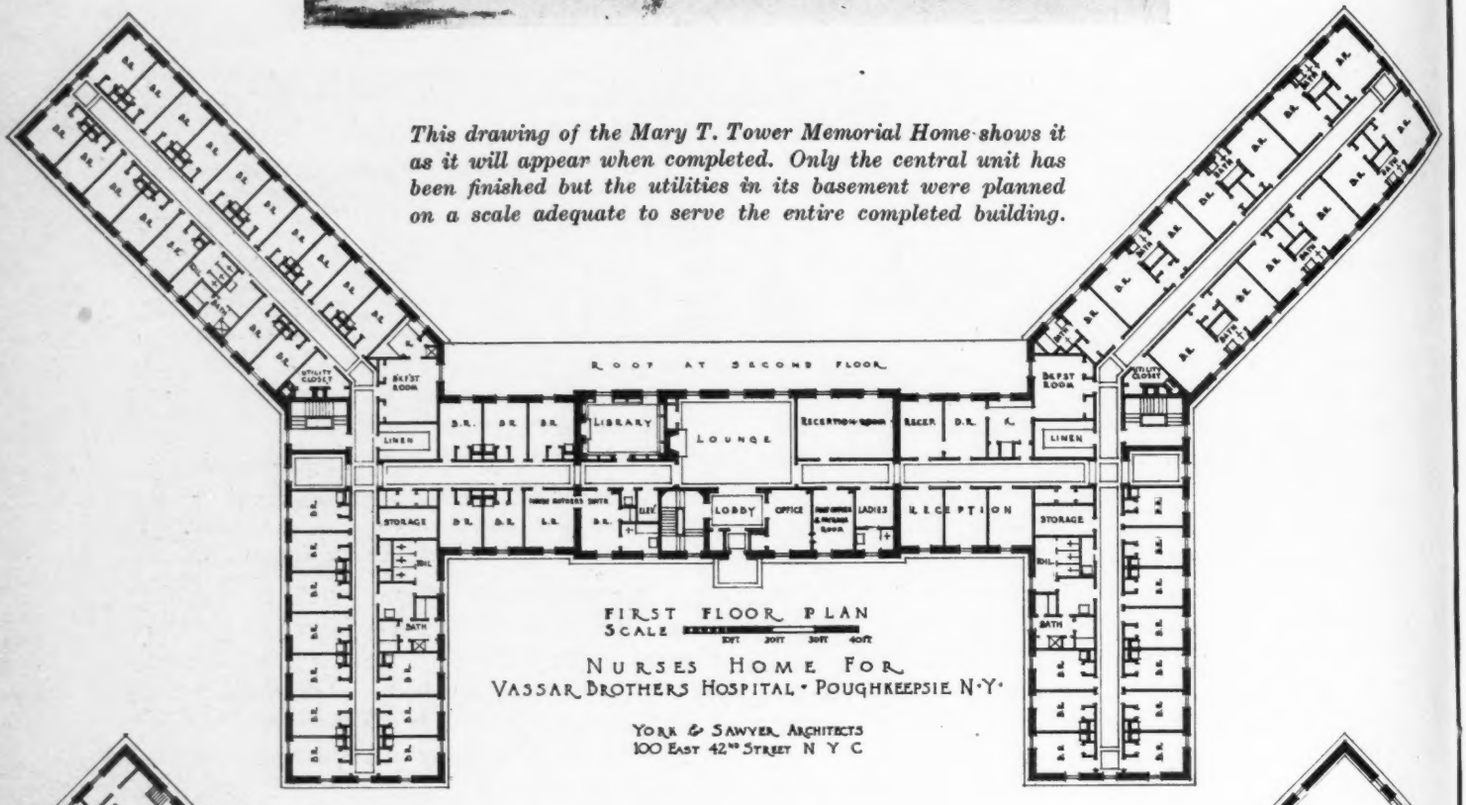
The floors of these rooms are interesting. Of veneered plank with a finish veneer of ¼-inch thick selected straight sawed white oak glued on chestnut cores ⅝-inch thick, with back paneling of the same thickness as the face paneling, the boards vary from 6 to 11 inches in width and from 4 to 12 feet in length.

Nurses' rooms were planned for size and shape in relation to the furniture to be included. Each room is 9 feet 6 inches by 14 feet, including the clothes closet. Clothes closets are furnished with a shelf, a pole and a shoe rack, and their doors have a group of five or six half-inch holes bored in a triangular design near the top, and a space of one inch below the door.

Doors to the rooms have louvers which may be opened or closed at will. When room doors stand ajar they hide the wash basin in the corner of the room, and are kept from hitting the basin by means of a metal control. All of the floors, in corridors or rooms upstairs, are green jaspé linoleum with a black border merging into a cove base.

Students' rooms are equipped with a bedstead, a dresser, a combination desk and bookcase, an

This drawing of the Mary T. Tower Memorial Home shows it as it will appear when completed. Only the central unit has been finished but the utilities in its basement were planned on a scale adequate to serve the entire completed building.

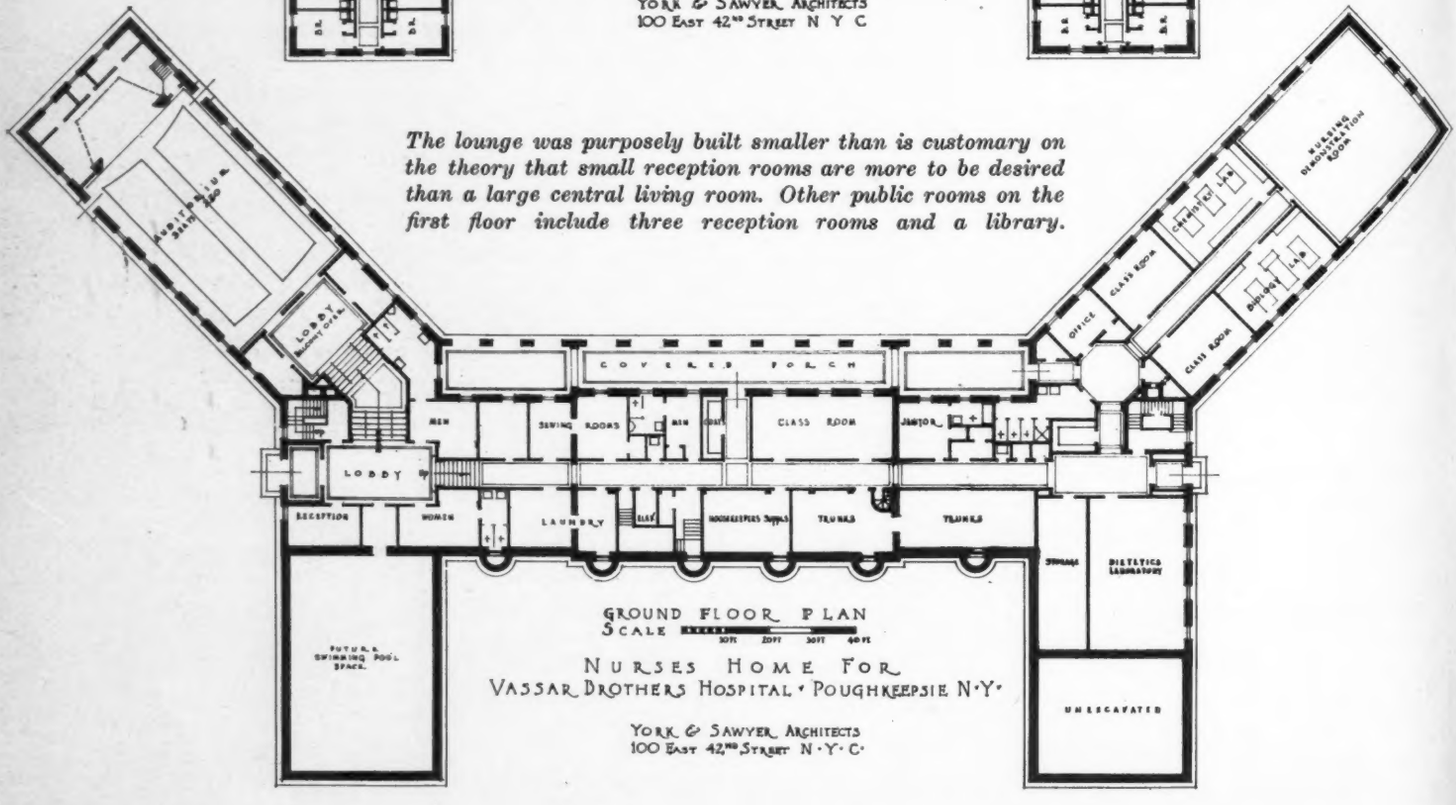


FIRST FLOOR PLAN
SCALE 10FT 20FT 30FT 40FT

NURSES HOME FOR
VASSAR BROTHERS HOSPITAL · POUGHKEEPSIE N·Y·

YORK & SAWYER ARCHITECTS
100 EAST 42ND STREET N Y C

The lounge was purposely built smaller than is customary on the theory that small reception rooms are more to be desired than a large central living room. Other public rooms on the first floor include three reception rooms and a library.



GROUND FLOOR PLAN
SCALE 10FT 20FT 30FT 40 FT

NURSES HOME FOR
VASSAR BROTHERS HOSPITAL · POUGHKEEPSIE N·Y·

YORK & SAWYER ARCHITECTS
100 EAST 42ND STREET N·Y·C·

easy chair, a straight chair, a desk lamp, a floor lamp, a screen to hide the washbasin, a rug, a looking glass, a recessed medicine cabinet, a waste basket, a set of sunfast drapes and a window shade. All the furniture is maple.

Each floor on which nurses live has a kitchenette, a telephone booth, a linen closet and the necessary toilet facilities. The kitchenettes are fully equipped with cabinets, pots, pans and dishes, refrigerators, sinks, two-burner gas plates, tables and chairs. Bathtubs with adjustable showers, two toilets, a washbasin and a cold water drinking fountain are also on each floor above the first.

A communicating system of tubes makes it possible for the office to signal a nurse in her room.

The attic, which at the present time is unfinished, is large enough for a golf practice unit or for other recreational purposes.

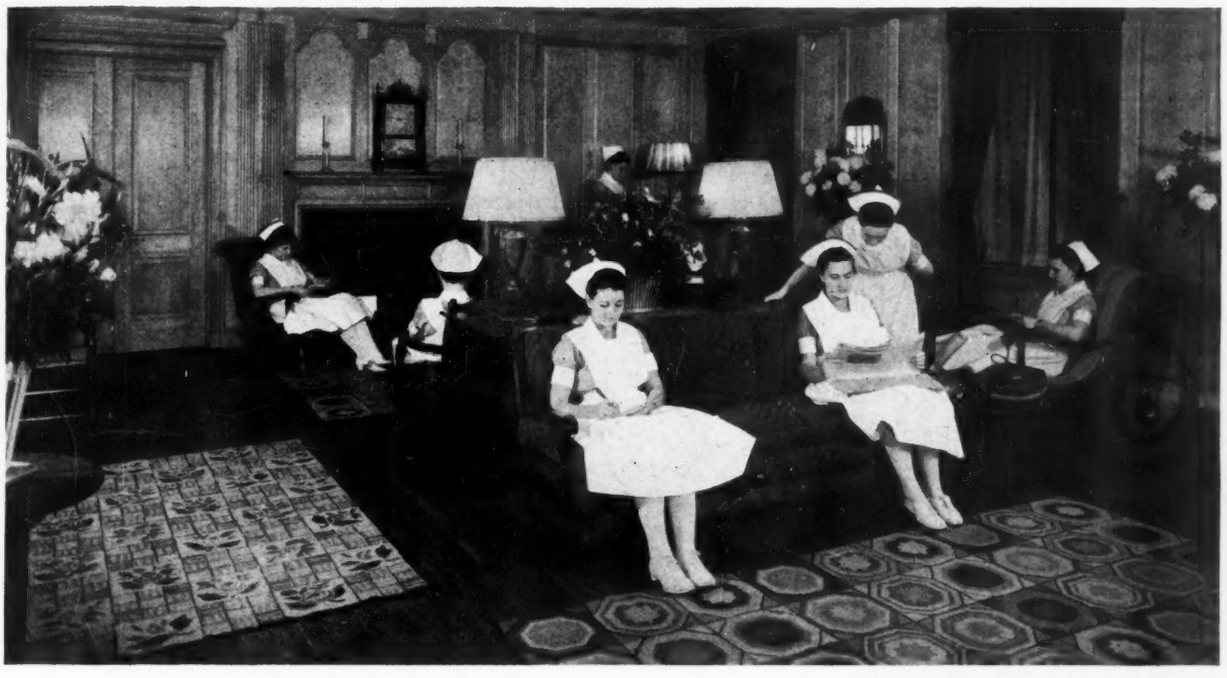
At the foot of the central stairway in the basement is the men's smoking room and toilet, furnished with a table, chairs and a coat rack.

A small laundry equipped with two tubs, a gas plate, a drier and a table is in the front of the basement, and opposite it and next to the men's smoking room, is the sewing room. This is furnished with an electric sewing machine, an electric iron, an ironing board, a cutting table, a rack for clothing and a full length mirror.

A housekeeper's room, with steel shelves for supplies, and a trunk room with open steel racks, take up the rest of the front of the basement, while the remaining space in the rear is one large room which will eventually become a dietetic laboratory, but is at present used as an informal recreation room, with a piano, radio, victrola, card tables, sofas and chairs.

At some future time, wings will be added to the building, which is now of twenty-four-bed capacity. The unit was planned with this expansion in mind, the entire future plans being incorporated into the architects' drawings. These plans include the provision of living quarters for student and graduate nurses and department heads, classrooms, laboratories, a combination auditorium and recreation room and a swimming pool. The completeness of the home is a direct result of notes compiled by Joseph J. Weber, superintendent of the hospital, over a period of years during which he was looking forward to the time when the construction of such a home would become possible, and to his work as consultant.

The cost of the building, including fixed equipment and architects' fees, was about $83,263.



A view of the lounge with its tasteful maple furniture and especially designed lamps. Right, a small reception room.

Someone Has Asked—

What Is the Value of Intern Conferences?

There is perhaps no better method of building and maintaining the intern's morale than to have the institution's medical executive discuss problems with him frequently. If the administrator is a layman there are still matters of interest which may be discussed to the profit of both.

A weekly conference of interns with the medical administrator has been found to be a potent method of maintaining a keen clinical and pathologic interest on the part of the resident staff. A discussion of the records of patients who have died during the week, or of others that present outstandingly interesting features is most helpful. The maintenance of a high postmortem interest is thus made possible.

The occasional discussion of the clinical findings of patients who have succumbed and who have not as yet been autopsied, each member of the conference writing down for future reference his diagnosis, creates an interesting diversity which is much to be commended. Moreover, such conferences permit interns who may be disgruntled with food, living quarters or some other physical angle of their hospital life to state their case frankly and thus avoid an accumulation of criticism which is harmful to them personally, and to the morale of the staff. Intern conferences of this sort have much to commend them and nothing to condemn them.

Shall Woman Physical Therapist Treat Man Patient?

This question, submitted by the director of the department of physical therapy, has as its basis a local situation in which a male patient strenuously objected to treatment by a female technician. The treatment consisted of massage, a Scottish douche and a cabinet bath. The answer to this query is obvious. If the patient objects to this type of treatment, a male technician should be provided. The physical therapy department of a hospital should be equipped to treat both sexes.

Basically, however, there is no reason why any hospital treatment should be accepted or rejected from the standpoint of the sex of the hospital employee administering the same. The day has long since passed when the woman intern is spared any type of duty either because of its difficulty or in consideration of her sex. The success of the woman intern depends upon her meeting any and every obligation which is imposed upon her male colleagues.

So called "screen cases" are less and less observed throughout the hospital. In the practice of the art and science of medicine there is to be found no place for prudishness. The physical therapy department is no exception to this rule and while, as has been remarked, both male and female technicians should be available, the director of the department should in the last analysis be held responsible for the existence of the highest type of scientific decorum in his department.

Audible Versus *Silent Paging Systems*

The director of a large hospital has asked for an opinion on the relative merits of audible as against silent paging systems. This is a large order, for we have long since ceased to hold arbitrary opinions on such subjects.

The silent system works perfectly well in small institutions. In a large institution, it becomes increasingly difficult to use it effectively. It can still be made to work well in certain parts of a large and miscellaneous hospital plant, where a limited number of doctors are associated with a given service or section of the hospital. The flash system usually elicits prompt responses to calls to such a section, for those on duty there need only remember and respond to numbers applicable to the local staff.

The chief difficulty arises in places like private room corridors, where the visiting physicians constantly change, are unlimited in number and visit irregularly, so that they themselves are not always familiar with their personal numbers. In these locations the men subject to call are so numerous that no nurse or attendant can remember the relationship between the numbers flashed and the visiting physicians wanted. In these circumstances, the audible system offers the best hope of satisfactory service.

It would be perfect, of course, if sounds could be reduced to the minimum volume required for clear enunciation and amplifiers be placed in all of the spaces where doctors might be found. No such program can be fully carried out, because it would involve carrying calls into every patient's room. Where the installations are limited on the private patients' floors, to inside nurses' stations, doctors' offices, and workrooms, miscarriages of calls inevitably take place, for frequently a doctor slips into a patient's room without being noticed; but this is a limitation that cannot be overcome except by an installation in every single room.

Are Flat Rates Advisable for Laboratory Service?

Institutions that offer a flat rate for the in-patient find that sometimes physicians admit patients to the hospital for a few days' stay to avail themselves of a laboratory rate which is much out of proportion to the service given. A flat rate of from $5 to $10 is often set to encourage the thorough study of private room patients. It is not meant to be employed in the case of short stay patients who are admitted solely for study.

To provide for the latter type patient, some hospitals have devised a flat rate grouping covering the major laboratory services requested by the community doctor. For example, a gastro-intestinal study consisting of a gastric analysis, full blood count, gallbladder drainage and possibly a blood chemistry might be listed for from $15 to $20, whereas the aggregate sum charged by the unit for these studies would considerably exceed this amount.

A liver, kidney and cardiac grouping of studies might be similarly offered at a reduced flat rate. The stay of the patient in the hospital for the above studies should not exceed four or five days, the fee for the room and board, of course, being charged extra. Such an arrangement should be of service to the average community doctor and because of the moderate rates charged, should not prove prohibitive for the patient himself.

If you have any questions to ask, the Editors will be glad to discuss them in a forthcoming issue

Check for Checks

That this is a good way to get them has been proved by the checking routine established at Albany Hospital, where delinquent accounts dropped from 6 per cent to 1½ per cent

By E. W. JONES and R. R. POTTER

CERTAIN problems peculiar to a hospital set its collection and credit department apart from business organizations which it resembles. After a careful study of these problems and considerable experimenting, Albany Hospital, Albany, N. Y., set up the following routines with satisfactory results in handling an annual volume of accounts receivable of approximately $1,000,000.

When a doctor makes a reservation for a patient, we ask him to give the patient's name and address, name of head of family or person responsible for bills, type of accommodation desired, when the patient may be expected and anything the doctor may know concerning the patient's financial position.

As intelligent credit rating is an aid to the doctors as well as to the hospital, we experience practically no difficulty in obtaining this information. When for any reason a doctor objects, he is referred to the director of the hospital and usually ends by giving full cooperation.

Reservations are passed along from our admitting officer to our credit manager who, by reference to our files (we have financial records for all patients who have had hospital care during the past six years), contacts with family physicians and reports from a credit reporting service, obtains the necessary information to permit rating patients. We are therefore reasonably well informed about all patients for whom advance reservations have been made.

The credit manager reports his findings to the admitting officer. If the patient has a record which justifies giving reasonable credit, he is informed upon admission that he will be billed for service weekly on an accrued basis. If his record is unsatisfactory, the patient is advised that we shall expect payments weekly in advance. In the latter case the admitting officer either collects payment for the first week's service upon admission or, if advance payment cannot be made, refers the patient or a responsible person (usually the latter) to the credit manager to make definite arrangements for time payments.

Patients are classified in six major groups:

O. K. (with no reservation) — This is for the individual who is a "gilt edge" risk. He can afford the best and always pays promptly. No attempt is made to have him pay while in the hospital. His bill is mailed to him after he leaves and he checks it out at his convenience.

O. K. Weekly — It is all right in this case to accrue billings on a weekly basis, even though special nurses are employed, to the extent of about $150. (Albany Hospital pays all special nurses engaged for duty in the hospital and collects from the patient.)

O. K. Weekly With One Special Nurse—This patient is good for about $100 on a weekly accrued basis.

O. K. Weekly Except Special Nurses — This patient is responsible, but due to limited income or resources should not be given credit for more than $60 to $75.

Weekly in Advance — Not a particularly poor risk, nor, on the other hand, a good one. The best way to avoid trouble is to collect weekly in advance for service.

Strictly Advance — This person is financially unreliable. He either has nothing (we are frequently able to secure authorization from the city or county welfare department to bill them for the care of this patient) or does not pay his debts. If he is allowed to run up a bill he will probably never pay it. We must therefore collect in advance at all times or write his account off as a bad debt.

We also use the information we gather to attempt to allocate patients to the proper type of accommodations. If a patient requests a private room and obviously can afford only semiprivate or ward accommodations, we try to convince him

upon admission that it is not necessary to overspend to assure satisfactory service. On the other hand, if a patient who can afford to pay cost or more applies for service at less than cost, we attempt to convince him that he should at least pay the equivalent of cost for his care.

When we find that a patient cannot afford to pay for hospitalization, we advise him to make proper application to the department of public welfare in his community for an order authorizing us to bill them for the patient's care. To impress upon the patient the necessity for applying for a city order, we bill him in advance at ward pay rate and have him sign a guarantee to pay. On admissions where reservations are made by doctors sufficiently in advance to allow us to assemble the necessary information, it is our experience that we have no difficulty with the patient's account.

When the emergency patient is admitted, we determine definitely to whom the bill should be rendered, and if it be the patient or a relative or friend we have them sign a guarantee. If the patient is a workmen's compensation case, he sometimes presents a note from his employer, identifying himself as such, and at other times it is necessary, by telephone or otherwise, to confirm this fact. All telephone authorizations are later confirmed in writing. When a patient whose care should be charged to a public welfare organization is admitted, he usually presents an order from the organization upon admission. If not, we usually admit the patient and advise a relative to make proper application for the order immediately.

If the account is to be paid by the individual, we make every attempt to have a responsible relative or friend guarantee it, so that bills will be sent to them rather than to the patient. This is to avoid disturbing the patient about financial matters.

Legally Binding

If a case involves third party liability action we have the patient, or his legal representative, sign a guarantee authorizing payment of hospital and doctor's bills from any settlement made. This agreement is legally binding and obligates the one making a settlement to pay the hospital and the doctor's bills before any payment is made to the patient.

When patients are admitted without an advance reservation, the admitting officer notifies the credit manager who then assembles the financial facts necessary to allow us to handle bills and collections properly.

Except for workmen's compensation cases and charges to public welfare organizations, all patients' accounts are billed weekly from the date of admission. Some are billed weekly in advance and others on an accrued basis, depending on the classification of the account. These billings are made by the cashier and are cleared through the credit manager before they are mailed.

The credit manager follows these accounts closely, the procedure being that three days are allowed for the bill to reach its destination, and a check to be written and sent to us. If a remittance is not received at the end of the third day after the bill is mailed, the account is carefully scrutinized, and if it appears advisable, a letter is sent requesting that the bill be honored. It is again checked at the end of three more days and if no reply to the bill or follow-up letter has been received, we again determine what the next move should be.

Workmen's compensation accounts are billed upon the discharge of the patient, unless he is still in the house at the end of the month, in which event we bill for services rendered to the end of the month, and monthly thereafter until he is discharged. Charges to local public welfare organizations are billed at the close of each month, and those for other public welfare organizations after the patient is discharged.

If a Discharged Patient Cannot Pay

If a discharged patient for some reason is not in a position to pay his account in full, his financial problems are discussed with him to determine to our satisfaction, as well as his, what method should be adopted in liquidating the account at some future time, and we accept a note for the unpaid balance, which note is payable according to terms agreed upon. We attempt never to accept a note on which payment in full or in part is not due within 60 days. It is a common experience that the longer an account runs, the harder it is to collect.

The majority of those from whom we must accept notes are working at low salaries and can afford to pay only a small portion of their periodic income on such an account. For this reason, we usually attempt to have the payer agree to pay a certain amount of his periodic income on the account until it is entirely liquidated. In this way the account is always a current one from the date of the last payment.

We divide the responsibility for following our open accounts receivable among four members of our personnel. Because we must man our admitting desk twenty-four hours a day, our cashier's window for fourteen hours a day and furnish reasonable relief for the five persons we employ regularly in these departments, we must have six clerks in these departments, and except for the daytime admitting clerk none of them is extremely

busy. Therefore, we allot this work as follows:

Accounts for Undischarged Patients: The credit manager follows these accounts. He must see that the cashier bills every individual account weekly; that we receive proper response from these bills; that every account for which some corporation or organization is responsible is properly guaranteed. He interviews patients or guarantors, when necessary, and sees that some definite arrangement is made for future payment if the account is not paid currently.

Current Year's Accounts for Discharged Patients, Except Compensation and Welfare Accounts: The evening cashier handles these. She works a 10:30 a. m. to 8:30 p. m. shift, and must act as cage cashier while the daytime cashier is at lunch or having a half-day, and after 4:30 p. m. She has ample time to follow these accounts during the balance of the time she is on duty.

Accounts for Prior Years, Except Compensation and Welfare Accounts: The relief clerk follows these. She also compiles our "Revenue from Operations" and is the accounting department stenographer.

All Compensation and Public Welfare Accounts: The daytime cashier follows these as it does not require her full time to discharge her other duties. Because these accounts are properly secured when the patient is admitted or shortly thereafter, most of these accounts are paid in a routine way. Only a few of them require follow-up and these on a monthly basis.

Following Accounts Receivable

Following is a detail of the general procedure used in following our accounts receivable.

Accounts Owed by Individuals:

If payment is not received at the time, a bill is either given to the patient or forwarded to the guarantor immediately after the patient is discharged, or special services such as x-ray, special laboratory, electrocardiograph, are rendered. The account is flagged for one week from that date, unless a note is received.

When notes are accepted, the account is flagged for three days before the due date and a notice reminding the individual of his obligation is sent to reach him one day before the note is due.

If payment is not made when due on a note or within one week from rendition of a bill when no note has been obtained, a second statement is mailed and again the account is flagged for one week from that date. A follow-up letter accompanies the statement.

If after another week we still have received no payment and have not heard any word from the patient, we forward a letter reminding him of the indebtedness and requesting payment. The account is again set up in file for one week from that date.

With no action at the end of the third week, we mail another letter requesting that the patient either remit, or state on reverse side the reason why payment cannot or should not be made. Once more the account is flagged for one week hence.

If we receive no word by the end of the fourth week, we write insisting that the account be given immediate attention, and the account is again set up in file for the following week.

By the end of the fifth week, it is obvious that the debtor does not intend to reply to our stereotyped letters and we therefore either forward him a specially dictated letter or refer the account to a personal contact man if the payer resides locally, or to the collecting agency which handles this work for us on out of town accounts.

Referred to Collection Agency

We keep a close check on local accounts through the contact man and if he does not obtain satisfactory results within a reasonable time, we refer them to the collection agency.

All accounts which have been referred to the collection agency are reviewed twice a year. All accounts which for one reason or another appear to be uncollectible and those which we may possibly have been able to determine to be so before they are referred to the agency, are tabulated on a report which is referred to our governing body with recommendations that they be written off twice yearly.

If at any time throughout this procedure we receive payment, the account is naturally closed and taken from the file, so that patients will receive no further communications regarding indebtedness after they are liquidated. Also, if we receive a reply stating when and how payments may be made or why payments cannot be made, the account is taken from our file and given special attention.

Compensation Accounts:

These accounts are billed the day following the discharge of the patient to the employer or the insurance carrier.

Once each month a statement of all accounts owed by every employer or carrier is rendered to each one owing any accounts, together with a letter requesting they remit for them as early as possible. This is done about the fifteenth of the month.

After an account ages to three months and we have not received payment or any word as to what is holding up payment, we telephone or write asking why the account has not been paid.

If we experience difficulty in obtaining settlement and cannot be satisfied that there is a sufficient reason why the bill is not paid, we request the New York State Industrial Commission to call a hearing in the case to have the debtor show cause why payment of the bill should not be made.

We attempt to meet the local representative of all insurance carriers at least twice a year for the purpose of keeping in touch with their problems and passing ours along to them so that at all times we have a reasonably friendly relation with them.

Accounts With Local Welfare Department:

These accounts are usually properly secured when patients are admitted or shortly thereafter. If difficulty is experienced in obtaining an authorization to bill the account, we do all we can to cooperate with the patient in obtaining the order and with the authorities in getting the applicant to them so that a statement may be obtained. When necessary, we take the applicant to the authorities.

After proper authority is obtained, it is only a case of billing the account monthly.

Accounts for Public Welfare Organizations Other Than Local:

These accounts are also properly secured upon admission or shortly thereafter and when this is not done, we do anything we can to get the applicant and authorities together.

The accounts are billed on the proper forms immediately upon the discharge of the patient.

These accounts are followed monthly, and if they are not paid within three months from date of discharge of patient, we give the account any attention which may be deemed necessary.

We try to maintain a close personal contact with all welfare officers so that all contacts may be made on as friendly and understanding a basis as possible.

No departures are permitted from these routines unless authorized by the credit manager, and in order to be certain that these routines are strictly followed, he requires all accounts accruing each day to be placed on his desk before any action is taken on them and he issues specific instructions as to what the next move will be.

A Fine State of Matters

Before we adopted these procedures, our loss from bad debts ranged from 4 to 6 per cent, but during the four or five years we have followed them, our losses on accounts have been held to approximately 1 per cent of earnings, which compares favorably with merchandising and industrial experience.

We find that any departure from this procedure or any let-down on the part of anyone responsible for any portion of the detail, however temporary it may be, materially affects our losses.

A quarterly analysis of accounts receivable is prepared by the office manager for the director so that the director at all times has a clear picture of the accounts receivable.

The cost of our credit department, exclusive of the salaries of the credit manager and the part-time stenographer assigned to the department is as follows: credit information purchase, $641.52; commission paid to two different outside collection agencies, $351.91; salary and commission paid to a young law student who collects for us on a part-time basis as a direct hospital collector, $336.47—a total of $1,329.90.

We pay our credit manager at present $130 a month and expect to advance him eventually to $160 a month. A stenographer half of whose time is assigned to the credit manager is paid $85 a month.

Control of Electric Light Bulbs

So much has been said on the subject of waste that it should be unnecessary to suggest care in the replacement of electric bulbs. However, mention should again be made of the wisdom of insisting upon the turning in of burned-out lamps in exchange for new by all departments, and the testing of lamps turned in to detect those still usable. Care should be taken, however, to eliminate bulbs which, while still able to burn, have passed their period of real efficiency. While such a test will not reveal many usable bulbs, the method has the merit of preventing good lamps being turned in through accident or carelessness. A careful record of consumption by departments, and by total outlets in the building will detect unnecessary use and act as a check on extraordinary consumption for any cause. It will also make possible comparisons with other hospitals, which may be demanded by board members from time to time as an index of economy in this important item.—*F. Stanley Howe, Orange Memorial Hospital, Orange, N. J.*

Fulfilling Obligations

The layman, entering a hospital as a patient, steps into a new, strange sphere and consciously or unconsciously fears it. It is not necessarily the institution he fears but all that it involves. We know what it is all about and it is up to us to make his stay pleasant, therefore the utmost effort should be used in actions, words and even tone of voice to inspire confidence. An operation, which is a daily or hourly event in hospital life, to the patient may be the first such occasion and certainly is an important one. This should not be overlooked by doctors and nurses. Most patients in their own spheres are important. On entering the hospital they are interested only in their own illness and its outcome. Only if it gives professional treatment with consideration, kindness and courtesy has the institution fulfilled its obligations.—*Esther M. Johnson, R.N.*

Laundry in Modern Terms

By RAYMOND P. SLOAN

DRIVE around to the rear of the attractive group of brick buildings comprising the Nassau County Tuberculosis Hospital at Farmingdale, N. Y., and be introduced to that unit which is the hospital's special pride — its new laundry and power plant. You will find it nestled in a grove of fine tall trees a short distance from the main building. Scarcely would you detect its presence were it not for the brick chimney which reaches upward higher even than the trees themselves. Plenty of sunlight and air flood every corner, and in summer "swept by cool breezes" promises to become more fact than myth.

The building has only recently been completed, but already it has been declared by those who should know, quite the latest thing in hospital laundries. The laundry, it should be explained at the start, despite the fact that it occupies only half of the building (the other half is devoted to the power plant), constitutes the entire story. The power plant is a tale in itself.

The building, including laundry, power plant and rooms for help on the second floor, represents an expenditure of $124,599. Some $29,000 was expended on laundry equipment alone.

Having dispensed with these cold, hard facts, let us study the layout briefly. The first entrance opens on a stairway which leads to nine employees' rooms above. More about this later. Next we come to the two front entrances protected by a canopy. Through one of these the soiled linen goes and from the other it comes out clean and ready for distribution among the various buildings.

The doorway to which the soiled linen is delivered enters into a sorting room. Here plenty of space is provided for preparing the articles for the washers which are just inside. The laundry itself is large and airy, providing ample space to handle comfortably a substantial volume of work. Walls are tile and the floors cement.

There are three washers, two big ones and one smaller. In addition the equipment comprises one big unloading extractor, also a small one, two tumblers, large flatwork ironer, a starch tank, soap tank, four presses, three ironing boards, four laundry trucks and three racks for curtains and blankets.

The linen is rolled from the washers to the extractors in trucks. From the extractors it is lifted by hoist and overhead crane over to the shake-out

New standards of laundry procedure have been established in this well equipped modern laundry.

table. That which goes to the mangle is turned over to the men in charge; all hand work is passed along to the girls who operate the presses at the extreme rear of the room. Each operation follows a logical sequence around the large room—in one door, and out the other.

Five Persons Serve 560

All the linen of the entire institution, which houses approximately 420 patients and 140 employees, is done on the premises, including uniforms. This means that about 120 nurses' uniforms alone are laundered weekly. Five people are engaged in the work, two men on the flatwork ironer and two girls on the presses. The fifth is an all-round manager or supervisor. The pay roll for the group totals $310 a month and maintenance, individual wages running from $50 to $90 monthly.

The life of hospital linens, blankets and uniforms depends not only on the type of equipment used in laundering, it has been found, but upon the care given the various articles while in process, also the attention which the equipment itself receives.

Men and women employees who are happy in their work and who take personal pride in seeing the great stacks of snowy white linen piled up before them ready to be returned to their various departments are indeed important members of the hospital family. This family at Farmingdale numbers several who have been with the institution some eight or ten years, and one even possesses a record of twelve years' service. They watch each item carefully. When it is noted that some of the towels are growing old and thin, they are laid aside and cut up into small pieces, making a return trip to the hospital as hand towels. Waste is to be avoided at all times.

Not only is this group fortunate in its ideal working conditions, but in its living accommodations as well, particularly those who have recently established homes in the attractive rooms above the laundry. Nine rooms for male help line either side of a long corridor. These are all attractively furnished with a spacious sitting room at the end of the stairs which leads on to an open deck where on summer evenings the men may sit around and smoke.

Small wonder that visitors to the hospital are invariably asked to save time for an inspection of the laundry. It is one of the sights of the hospital, not only because it represents the latest addition but because it establishes new standards for laundry procedure. It is the laundry in modern terms.

As to the Special Clinic

By JOHN E. RANSOM

Special clinics are frowned upon or applauded extravagantly. They deserve, believes Mr. Ransom, neither of these attitudes, but have a definite place and value of their own

ONE of the noteworthy features of dispensary development during the last two decades has been the rise and growth of special clinics. To a degree this has followed and been a product of the tendency towards greater specialization in the practice of medicine.

In the old days a dispensary or hospital outpatient service had relatively few clinics or departments. They were, of course, general medicine, general surgery and, perhaps, pediatrics, otolaryngology, ophthalmology, urology and gynecology. More recent years have witnessed the appearance of many and varied subdivisions of these well established general and special fields of medicine and surgery.

It may be well to define the term "special clinic." As used in this article it does not include those generally recognized specialties under which the staffs of hospitals and the faculties of medical schools are classified and which the American Medical Association recognizes in its classification. Rather it refers to such special divisions of the field of general medicine as metabolism, thyroid, endocrine, syphilis, tuberculosis, gastrointestinal, allergy or protein sensitization, cardiac, hematology, arthritis, albuminuria. In surgery it refers to plastic surgery, rectal surgery and fracture. In pediatrics, to rickets, feeding, together with many of those mentioned under medicine. In addition to these there are food clinics, posture clinics, habit clinics and thought control classes. This is only a partial list.

Opinions Differ

There are conflicting opinions as to the validity and value of the special clinic. It is the purpose of this paper to present some divergent views.

Let us consider some of the arguments against the special clinic. It is held by many that medicine has become too highly specialized; that there are doctors who rate themselves as specialists in narrow fields who lack sufficient training in general medicine or surgery to give an adequate basis for specialty practice; that special clinics have a tendency to help produce these poorly trained, self-styled specialists.

It is argued that the great majority of dispensary patients can be cared for adequately in general clinics and that special clinics tend to drain most of the interesting work away from general clinics. In teaching hospitals this depletion of the general clinics is especially unfortunate because, while courses are given medical students in several of the general clinical departments, these students have little opportunity to examine patients that are referred to special clinics and to learn about therapy in some of the most significant diseases.

Some special clinics offer no courses to medical students. It is said that special clinics attract many of the more alert and progressive young doctors away from the staffs of the general clinics. The results of these tendencies are that there may be left in the general clinic only the uninteresting patients and the uninterested doctors.

It is held by some who look with disfavor on special clinics that examinations in these clinics are likely to be directed only toward the subject of special interest, and thereby lack essential thoroughness. Patients in these clinics may have serious disorders, which because of the narrow interest of the special clinicians, may be overlooked.

If all these accusations were unequivocally true, there could be little justification for the special clinic. But there are telling arguments on the other side of the question.

Here are some of the contentions of the proponents of special clinics. In the first place, medical science has progressed to the point where a physician must confine his work to a special field if he is to be really proficient. There may be excellent diagnosticians in the fields of general medicine and general surgery, but many modern

therapies, calling as they do for practice, special equipment and technical aid, cannot be well applied except by the specialist.

General clinics, particularly general medicine, must and should be chiefly diagnostic in function. Their value in teaching medical students and in training staff clinicians lies in the opportunity they afford to study diagnostically a large number of patients. If properly managed they can and will attract able doctors to their staffs. Special clinics are more distinctively treatment clinics.

Though it may be true that men are working in highly specialized clinics who lack fundamental training and experience in general medicine, such need not be the case. A medical service, let us say, which provides a general medical clinic together with a number of special clinics, may have a program that requires a number of years' work in its general clinic as a prerequisite to working in its special clinics.

As to the depletion of general clinics of most of their interesting material, this need not be at all. Patients should be sent first to general clinics for diagnostic study, and if found to present conditions that call for the special diagnostic skill or therapeutic advantages of special clinics, they should be referred or transferred to those clinics.

Take Syphilis, for Example

Special clinics provide for the economical organization of treatment facilities. Take syphilis as an example. There is hardly a clinic in an outpatient department that will not discover cases of syphilis among its patients. To provide facilities for the treatment of such patients in each clinic is expensive and unnecessary. There should be one special clinic for the intensive study and treatment of syphilitic patients. The same is true in large measure of patients suffering from diabetic disorders and allergic diseases.

The chief of a gastro-intestinal clinic in a large teaching hospital outlined somewhat as follows what he held to be the function of a clinic such as his: It is not a clinic to which every patient complaining of gastro-intestinal discomfort should be sent, but one which should be so manned and equipped that other clinicians might refer to it difficult diagnostic problems in its field.

There is still another advantage which some special clinics afford. Certain types of patients have needs that call for service outside the immediate field of medicine. Diabetics, for example, may need the service of a dietitian as well as of a doctor, and cardiacs may need the help of a social worker. These special auxiliary services function better, as a rule, if the problems with which they have to deal are concentrated under one medical management than if they are scattered through a number of clinics.

For purposes of illustration, let us take the cardiacs. Many patients who have heart disease cannot be greatly helped by a physician. They have problems, however, that are related to living and working conditions in the solution of which they may need guidance, help and encouragement. If they can find living quarters and types of occupation that do not aggravate their physical handicaps, they may live longer, work longer and be happier than they could otherwise. It is the social worker's function to help them with these and other related problems.

A Social Worker Specializes

The social worker attached to the cardiac clinic tends to become a specialist herself. She must of necessity learn what are the types of work which various classes of cardiacs can safely do. She must become familiar with the employment resources in her community. She must be able to encourage patients who need occupational retraining and know how to help them obtain it.

Above all, she, as well as the doctors in the cardiac clinic, must realize that they deal not only with patients who have heart disease but quite as much with men and women who may be obsessed with the fears and anxieties which heart disease may produce. Social work of this type and quality is rarely obtainable from the social worker in a general medical clinic.

Is there a way out? Can we have the special clinics with the facilities they provide for treatment, training and research, and at the same time conserve the general clinics which are and always will be the foundation of all good dispensary service? We can if we know the rules and play the game according to those rules. They are few and simple.

The fundamental necessity of good general clinics must be recognized and their facilities developed. Special clinics must not be established without sound reasons for their existence and the assurance that they will be capably manned, properly equipped, and supplied with the necessary auxiliary personnel. Special clinics must be primarily refer clinics.

Men who desire to work in special clinics must be adequately prepared before they are permitted to join the staffs of those clinics. Special clinics in teaching hospitals should provide courses for medical students. The staffs of special clinics must realize that they and their clinics are units of an organization which must not be weakened in some of its parts in order that other parts may be developed and strengthened.

Two Problems for Trustees

By ROBIN C. BUERKI, M.D.

LET me discuss with you briefly two problems that face hospitals today. I cite these as samples of the type of thing that hospital trustees acting through a hospital council as well as individually, can well consider in great detail.

The first concerns the capital investment in our hospitals. Approximately $90,000,000 is invested in the plants and in the equipment of the hospitals in Chicago alone. In addition to that there is a further substantial investment in endowments of some institutions. Practically all of this money has been provided by the public without any expectation of direct financial return. It comes to us as a gift — a trust, hence we are more accountable for these funds than we would be for money borrowed to run a business.

Are we providing the public with the fullest dividends on its capital investment? This is the basic question of our stewardship.

Your engineers say that progress depends on the organization of men and materials. The better we organize our men and materials in relation to the problem they are to solve and in relation to each other, the more effective we become. Let's apply this same formula to the field of social action. Are we employing this $90,000,000 so that it produces the largest possible dividends in terms of improved health in our community?

Chronic Diseases Costly

Looking at the question broadly, we recognize two principal forms of disease, (a) acute disease and (b) chronic and sub-acute disease. Acute disease is the most spectacular but chronic and sub-acute diseases are probably the most costly in the long run. Furthermore, the chronic and sub-acute diseases often open the way for serious attacks of acute illness.

What are our hospitals doing to meet these problems of the sub-acute and the chronic? How can we give this aspect of disease its fair share of the benefits of our $90,000,000 investment?

The answer as I see it is that we must have more facilities for chronics and that general hospitals must turn more of their capital support and material facilities over to departments to serve patients who are not in bed. We do this latter, of course, to a certain extent through our out-patient departments for the indigent and near-indigent classes, but for the numerically much larger group of middle income most of us have as yet done little.

I won't attempt to outline the specific methods or type of organization by which this can be achieved. Fortunately you have in your own community at least three hospitals which have already taken beginning steps along this line. I refer to Passavant, Henrotin and Evanston Hospitals and there may be others.[1]

Capital Poorly Distributed

Turning now from the sub-acute and chronic conditions to the acute conditions, what do we find? Here again our capital has not been allocated according to definite plan. A very large part of it is provided for the benefit of the surgical case and a much smaller fraction for the medical patient. Most medical patients continue to obtain their service without getting the benefit of what our hospitals could provide to them. I believe that we can demonstrate beyond doubt that a wider variety and a larger percentage of acute medical cases should be hospitalized in the interests of more effective and less costly treatment for the patient.

A third source of waste resulting from ineffective use of capital concerns our service departments. We attempt to provide in our hospitals the best equipment for x-ray, clinical laboratories and all the various forms of physical therapy, yet in many instances this investment is duplicated in the offices of private physicians, often the very same men who are on our medical staff. As a result, neither our equipment nor their equipment is used to anything like its full capacity. This lack of utilization must be paid for somewhere, either through higher fees by patients or through lower returns to physicians and less income for hospitals to carry on their work. This problem, too, can be met by making our facilities more generally available to physicians for use by their ambulatory patients.

The final instance of waste of capital facilities is, of course, the vacant hospital bed. Two years

ago when I first discussed this question publicly[2] that was a more acute problem than it is today, but even now I find that during the first eleven months of last year the voluntary hospitals of Chicago reported only a 61 per cent occupancy, a figure, incidentally, considerably lower than the ones reported for New York City, Washington, D. C., San Francisco and Cleveland. This problem you are beginning to solve through group hospitalization.

Let no one say that because funds are given to hospitals there is any less waste when these funds are idle. Our capital dollars must work. If we can't make them work in our hospitals we have no right to tie them up there and keep them out of other productive activity. These dollars were meant to relieve human suffering. When they are idle, they fail to do so.

Distinguished Service

My second sample problem of concern to trustees I will touch on only briefly. It is, however, of outstanding importance. I refer to the development of the personality of our institutions, of those traits which go to make up distinguished service. One of my associates has put this so well that I can do no better than to quote his statement: "A hospital may be a distinguished institution, no matter what its size. If it is great in spirit, original in its outlook, creative in its service and inspiring in its community relationships, it will assume a definite personality. Distinctive personal character compels interest, commands respect and augments support. It is the most potent force in attracting and holding friends for the hospital and a true stimulant to progress."[3]

There is not time to outline in detail the technique of developing distinguished service in a hospital. There is such a technique. It involves a proper charter adequately adapted to the functions which the hospital should perform, a virile, active board of trustees composed of men of broad and constructive vision, an administrator and assistants who are trained and able to analyze the hospital needs of their service area, to inventory the capacity of the hospital to meet those needs and then to organize the institution to supply needed services to the community up to the fullest measure of the hospital's capacity.

Distinguished service does not imply grandiose architecture and it certainly should not be confused with sheer difference or eccentricity. Unique service is not necessarily distinctive. Difference as an end in itself is a shallow abomination.

A formula for achieving distinguished service has been offered by Dr. S. S. Goldwater of New York. It appeals to me. He says that success in attaining true caste or individualism is more likely to be achieved where the hospital has the good fortune to find in its organization an individual or group with special talent for a particular kind of work and then lends encouragement to the individual or group to exercise imagination to the fullest extent, thus affording the talent free outlet for expression and development. He reflects that hospital departments and services that have become truly famous are almost inevitably associated with outstanding genius or talent of a special sort.

But genius is rare. Can close cooperation and the proper organization of the best talent we have produce the results of individual genius? If so, we might phrase the formula thus: (1) Service of any kind does not attain distinction unless there is a public need of it. Consequently uncovering the special needs of our community and clearly defining them is the first step. (2) We must appraise our material facilities and the talents of our staff and decide which of these special needs we can best fill. (3) Work decided upon must then be started on at least a small scale. (4) Persistence must be shown in seeking support for the work.

In closing, may I wish for the hospitals of Chicago an increasing growth of coordinated effort until all of the institutions in this community are giving as large dividends as they possibly can on the investment provided them, and each institution has developed that type of distinguished service needed by the community which it is best able to provide.*

*Read at a meeting of all trustees of Chicago voluntary hospitals, January, 1937.

[1]Miller, Veronica, Henrotin Blends Beauty and Service, Mod. Hosp., May, 1935; Cutter, Irving S., Hospital Extension Service Benefits the Patients, the Staff Men, the Hospital, Mod. Hosp., Feb., 1936; Evanston Opens Its New Staff Rooms, Mod. Hosp., Sept., 1936; Davis III, Nathan S., Wider Service to Doctors—A Key to Better Occupancy, Mod. Hosp., Oct., 1935.

[2]Buerki, R. C., Do Your Capital Dollars Earn Full Service Dividends? Mod. Hosp., Feb., 1935.

[3]Ball, Otho F., Distinguished Service in the Hospital—A Stimulus to Progress, Mod. Hosp., Sept., 1934.

Reporting Delayed Requisitions

"I ordered that three months ago, and haven't got it yet," says a head nurse, a housekeeper, a dietitian. "And whose fault is that?" says the superintendent. "Why, the storekeeper," "the purchasing agent," "the engineer," is the reply, according to whether it concerns supplies, new equipment or repairs. "No doubt it was his fault originally," says the superintendent, "but it is very much your fault not to have reported it before." Such incidents could not happen in a hospital with proper checks on unfilled requisitions, but many hospitals do not have such checks. In any case, it is the duty of departments to order only what is needed, and to keep after what is ordered until it is received, or refused.—*John R. Howard, Jr., Muhlenberg Hospital, Plainfield, N. J.*

Greeting Mr. Jones

By FRASER D. MOONEY, M.D.

Outside your door he was a free man. Inside, he gives up his freedom, unwillingly but resignedly. But must he become a case, a number, a room? It is for you to see that he does not have to accept this final indignity

MORE can be accomplished in overcoming some patients' hospital fears through the creation of an atmosphere of thoughtful and personal interest on the part of the hospital personnel than in any other way.

A patient's first hospital contact is with a member of the nonprofessional staff whose natural reaction too often is to regard the newcomer as "just another patient," an attitude much the same as that adopted by the professional staff to whom a patient is "just another case," or "that jaundice in the first bed on the right."

A hospital exists for its community, and though its interests are not commercial, the creation of an air of hospitableness may go far in putting the patient at his ease, soften his reaction and thereby add to his comfort. It is gratifying and reassuring to physicians and hospital administrators to have patients who enter the hospital with some coercion, volunteer such thoughts as: "If I am ever sick again I want to come here," or "I had no idea what hospitals were like, now I am convinced that this is the place to be sick." First impressions are lasting, and the impression made on the patient by the young lady at the information desk may have a decided influence on his future reactions and behavior.

The average John Jones would rather be well than sick and he usually enters the hospital against his wishes and oftentimes against his judgment. He thinks that his illness is serious if he has to come to the hospital and his thoughts are a mixture of feelings. This attitude of his should be kept in mind by the entire hospital personnel.

John Jones, having been impressed in some fashion by the receptionist, is next confronted with the distracting business conducted by the room clerk. Quiet, efficient and courteous though she may be, it is her object at the moment to get him satisfactory quarters, and get him there as quickly as possible. This should be done, however, in not too impersonal a manner.

Her job is one which calls for tact. Her only knowledge concerning Mr. Jones is that he is a patient of Doctor Smith's. With such scant information the proper admitting clerk should be able to convince the average patient that he is among understanding friends and that every effort will be made to make him comfortable and happy. Her interview with the patient should begin with a "How do you do, Mr. Jones?" She may ask him if this is his first hospital experience, or otherwise engage him in some bland conversation for a moment before getting down to business.

Taking the History

The admission history is taken next. In most hospitals such histories are taken by a nurse in the unit to which the patient has been assigned. This means that an important early contact is in the hands of any one of perhaps 150 persons. The idea of carefully choosing and properly training one person to do the greater part of this work has met with approval in several hospitals where it has been put into practice.

After Mr. Jones has selected his room, the admission clerk informs the hall man, often in the presence of the patient, that she has a patient to go to such and such a place. In doing this she might say "Mr. So and So, will you please show Mr. Jones, a patient of Doctor Smith's, to room 310?" Likewise she telephones the message to the nurse in charge that Mr. Jones is being sent to her floor. The hospital has already registered upon Mr. Jones as pleasant or unpleasant, depending upon the friendly or unfriendly contacts he has made. He is now introduced to the nurse in charge, who escorts him to his room.

In a well organized hospital, the house physician sees the patient shortly. If he is a wise doctor he will spend a minute or so in chatting with him

before he "puts on his act." By this time Mr. Jones considers himself a monger of information, most of which he may regard as irrelevant to his chief complaint.

The superintendent of a hospital should stand for something definite in his community. He is, in a sense, a public servant and his time when possible should be at the disposal of the public. It is true that if he is too generous with his time he will have little of it for his routine work. On the other hand, if he secretes himself he loses an important opportunity to learn more about his institution and ways of improving it through broadening contacts with patients, their relatives and friends.

Conferences with salesmen take time, yet much can be learned from such contacts. Some hospitals have certain hours set aside daily for sales conferences.

I feel that I cannot keep in touch with all important hospital functions unless I visit wards and rooms and have personal contact with the patients. I or my assistant, sees each private patient and nearly every semi-private and ward patient at least once during his period of hospitalization. It has been our experience that patients appreciate these calls and the time consumed is relatively small when compared with the gain of obtaining first-hand information.

The average patient and his family do not wish to think of financial matters during an illness, yet most hospitals send a statement to patients shortly after their admission. Many patients naturally resent this. We have discontinued this practice and wait a few days before sending a statement, a procedure which we believe has many advantages. There has been no appreciable change in our accounts receivable since the new method was instituted.

Below is a sample of an information card which is sent to private room patients shortly after their admission.

Date.....

Name .....

Room No.....Rate.....

The above is your room number and the rate per day, which includes meals, general nursing care, services of our house doctors, and all medications (except overly expensive or proprietary ones). Charges for the use of the operating room, the meals of special nurses, x-ray, physiotherapy and ambulance will appear on the statement at the end of each week.

This is for your information so that in the event of a misunderstanding it can be taken up with our cashier's office.

Meals will be served on request in the solarium on the first floor, or, during the summer, on the sun roof adjoining the second floor. Patients desiring this service for themselves or their guests will please speak to their nurse who will be glad to make the arrangements.

A well appointed barber shop is in the basement opposite the Clifton Building elevator. Barber service is available in the patient's room on request.

A news and cigar stand, operated by the Blind Commission, is on the first floor opposite the main elevators. Here will also be found a circulating library.

Radio and telephone may be installed at a nominal cost.

Guest rooms, or a cot in the patient's room, may be procured for the mother of a child under twelve years of age. The charge for a cot is $1 a day.

Patients frequently require some article of hospital equipment for use during convalescence at home. If you will inform us of your needs we will do our best to assist you. We will gladly comply with other requests of any nature whenever possible.

On the reverse side of this card is a schedule of rates.

Old accounts are a problem for all hospitals. A great many make a practice of having letters requesting payment written and signed by one of the office employees. We are convinced that our collections have increased and our contacts with the public improved since we instituted the practice of having such letters, even those concerning small accounts, dictated and signed by the superintendent or his assistant.

An extra charge for articles of diet not on the regular menus is made by many hospitals. The income thus received is, I believe, small. Patients, like the general public, dislike nuisance charges. We have discontinued charging an extra fee, and in fact we have invited private room patients to request special articles of diet and find that the practice of ordering aside from the regular menu is rarely abused. During the forenoon and afternoon patients are asked by the nurse if they wish any extra nourishment, such as orange juice, ginger ale, chocolate milk, grape juice. For this we make no extra charge. We find that the service is much appreciated. We also make provision for providing meals for guests and relatives of patients at a nominal cost.

Patients often leave some of their belongings at the hospital after their discharge. To mail such articles immediately to the home of the patient makes an excellent follow-up contact and helps cement the friendly relations which prevailed in the institution.

Beautifying the Hospital Grounds

Spacious grounds are an asset if kept attractive. Hospitals fortunate enough not to have the front door opening on to the sidewalk might follow to their advantage the splendid example set by public institutions and spend a bit of money for trees, plants and shrubs, not to mention an expenditure for grass seed which would do no harm here and there. If action has been delayed because of the shortage of funds, one may find that the local garden club, the board member who is retired and a garden fan, and the woman's auxiliary are all waiting for an invitation to take the responsibility of such a project.—*Ada Belle McCleery, Evanston Hospital, Evanston, Ill.*

It's Inventory Time Again

By JOSEPH C. DOANE, M.D.

Yes, but Doctor Doane takes it for granted you will inventory your hospital's physical properties. Do you, he asks, take as careful stock of your scientific work and of business practices carried on in the hospital?

VARIOUS types of stocktaking should be carried out in the hospital. The simplest is to take an inventory of the hospital's physical property. This type of stocktaking, however, while important, is the least advantageous to the patient.

An inventory of the scientific work presents splendid possibilities of discovering inefficiencies in technique. A review of organization practices is of the highest import and may reveal adherence to harmful traditions which because of their very nearness have been long overlooked.

Organization practices are not affected by the type of architecture, by the nature of the work performed or by the number of beds. They are fundamental. A football team succeeds in attaining its goal often in the same degree as it understands and practices fundamentals. A hospital requires the same frictionless perfection in the activities of a much larger number of persons.

Two Major Functions

A knowledge of the functions necessary in the conduct of a hospital is of first importance. These may be said to be two in number—the professional care of patients and the business management of the institution. These functions may be directed by one person or by the heads of two separate departments. As a by-product of each activity, the education of personnel and of the public must follow with the same relative degree of effectiveness as characterizes the care of the patient.

The professional care of patients is exemplified by the activities of the medical and nursing staffs, the diagnostic and treatment function performed by the laboratories, the nutritive and therapeutic function of the dietary department, medical social service, the preservation of clinical records and the admitting and discharging functions. Each of these may be performed by groups of varying size depending upon the capacity of the hospital.

It can be seen that organization functions in no way correspond in number to the persons who perform them. In some institutions of a closed nature, particularly in those owned and conducted by a city or a state, the professional care of patients is assigned to a medical administrator who at the same time is responsible for hospital management and for the business conduct of the institution in all of its phases. Hence functions must not be confused with either positions or persons.

The nursing function may be carried on either by a paid group of graduate nurses or largely by pupil nurses. Diagnostic and treatment functions may be conspicuous by their completeness or by their paucity. Clinical, radiological, cardiological, physical therapy and occupational therapy laboratories may exist as separate entities. They may be combined and placed under the direction of one or more persons.

The function met by the dietary department from a nutritive and a therapeutic angle may consist wholly of the former with little or no attention being paid to the possibilities of the latter. Medical social service may represent merely a subdivision of the business office which possesses no preventive or curative medical angle. This function cannot be adequately provided by persons trained only in business. The function designated as the care of medical records is often most incompletely performed and the admitting and discharging operations of the hospital may be of the most slovenly nature.

Personnel may be trained or untrained. Its members may be numbered by the score in any one department or a division may be represented by a single hospital employee. The need for per-

forming a function is unchangeable and the recognition of its existence must precede its practical exemplification. The number of persons employed to meet such needs is the only varying factor in the organization picture. While several functions may be performed by one individual, such as the dietitian in the small hospital being responsible for the housekeeping, the existence and importance of each separate activity should be recognized.

It is well for the hospital administrator to refer often to his check list of hospital functions to see whether his personnel are overlooking any necessary services or whether in striving to conduct the institution economically, he has omitted important functions. Perhaps the diagnostic and therapeutic necessities of the laboratories, the food therapeutic activity and the social service function are most often slighted in the organization set-up.

Robbing Peter to Pay Paul

From the standpoint of the second major class of hospital functions, business management, one may sometimes find that too great stress is being laid, comparatively, on the professional care of patients and the business function is being neglected, or the reverse may be true.

In making an inventory of the organization activities it is well to enumerate the various ends to be gained by the hospital personnel, to learn where inefficiencies are to be found, to search for lack of balance in the number of personnel assigned to each division and to endeavor to arrive at standards by which the number and type of persons so assigned may be determined.

One is surprised to learn at the outset that no recognized accurate standards exist. It is said, for example, that there should be one intern for each twenty-five patients, one nurse for every two to four patients, and one dietitian for each hundred patients. These represent but crude, inaccurate and often impractical numerical standards. The geography of the hospital, whether multistoried or constructed on a detached plan, the type of patients, the budget allowances, the functions to be fulfilled by the board and its elected representatives are but a few of the factors which affect such personnel standards. Each institution, therefore, must in a measure represent a law unto itself, although it is useful to learn of the experience of others in regard to the application of broad general rules.

Having decided on the functions which must be met, upon the number and character of the personnel, it next becomes appropriate to consider the type of individual best suited to meet these needs. It is not to the credit of the hospital field to be forced to admit that the qualifications of the personnel are not often carefully considered in the filling of positions. Certainly the heads of departments and their assistants should meet definite educational and experience standards. It is wholly improper to fit the position to the person rather than the person to the position.

Pay schedules are usually so flexible that great confusion is likely to result when promotions are being considered because the increase of pay of one individual is likely to wreck hospital morale unless the pay of others in similar brackets is also augmented. It is, therefore, an important matter to set down intelligently a description of the type of person which in the opinion of the administrator, confirmed by the board of trustees, is most likely to meet the needs as a department head.

Having determined the educational, personnel and experience qualifications of the key persons, the nature of their duties next becomes a matter which deserves administrative attention. There is no more difficult undertaking than the prosecution of a job analysis project. An attempt to describe the activities which engage the attention of hospital workers each hour of the day is likely to provide the administrator with many surprises. Not a few executives have found when the manifold activities of their staffs are brought to their attention that either the impossible is being expected of their workers or that many valuable personnel hours are being wasted by inefficient organization methods.

Having now suggested that qualifications, duties and salary lists be carefully reviewed, the next general topic to be considered is the question of whether adequate training is being given to the rank and file of each department. I refer here particularly to interns, nurses of all grades, admission clerks, laboratory and other specialty workers as well as to all those who labor in the far-off places of the hospital, such as the engineering department, the maintenance department and the laundry.

Some Meet the Public, Some Don't

It will at once be seen that the workers may be divided into two classes—those whose duties bring them in contact with patients and with the public and those who are required to practice the science of mechanics or the minor and routine activities of the day's work.

It will be granted at once that the former class requires a more intensive training in the art of hospital practice than those who do not contact either the patient or the public. Telephone operators, admission and information clerks, accident

and receiving ward nurses and helpers, head nurses, interns and all others by whose activities the hospital is largely judged by the public must present courtesy, suavity, understanding and discernment to a degree not required of the laboratory worker, the chief engineer or the foreman of the laundry. Classes in courtesy are little known but are of the highest importance.

The attention of the executive who is checking his organization set-up is strongly directed to the necessity of not relying upon the native skill or inward promptings of an untrained hospital group in meeting the public. Serious and methodical training of such groups is required.

Each worker should be provided with a set of instructions governing his activities. How are rules originated and what should be their nature? No institution can be conducted on the basis of the appeal which persons make to each other. The most intimate friends if assigned as colleagues laboring in the same or in separate departments or if placed in a superior and subordinate relationship will be likely to develop harmful personality difficulties unless carefully worked out rules as to duties and prerogatives are given them.

Rules governing the medical personnel originated by the staff, approved by the board and impartially administered by the executive are necessary if the first general function—the care of the patient—is to be met. General rules affecting the conduct of each department set down with all the detail necessary for universal understanding are the sine qua non of high morale and efficient service. The executive who is searching for the cause of lost motion, for the reason for unexplained friction, for an explanation for the lack of zest and progress in the work may often find his answer in the absence of carefully worded rules for the guidance of the various members of the personnel.

Once rules have been set down in print by the board the task of organization has just begun. The observance of rules always grows less meticulous and never more so. Drilling and more drilling in their understanding and observance, the instruction of new employees in the approved methods of conduct adopted by the hospital, all are a practical necessity. The time-worn and yet ever useful slogan of "organize, deputize and supervise" is vitally applicable to the matter under discussion.

Having placed together in a functioning relationship the parts of the machine how may we now judge whether it is capable of running smoothly? But few suggestions can be here set down. The ear of a trained person is capable of detecting defects in its operation by the sound of running machinery. By the same token the presence or the absence of that abstract quality, morale, which leads to a discordant note in the operation of the hospital machine, can be easily discovered by the skilled executive.

A scientific audit will detect efficiency or lack of it in the medical operation of the hospital machine. The number of postmortems, the attendance at staff conferences, morbidity and mortality figures, the reaction of the public to the hospital's work all are interesting and illuminating yardsticks which will enable the superintendent to discover defects in his organization set-up.

What Is Air Conditioning?

The term ventilation is gradually disappearing from use and has been superseded by the term air conditioning, says *Domestic Engineering*.

When supply air is delivered into a room with the temperature, humidity and air motion simultaneously controlled, it is termed air conditioning; when the temperature and humidity of the air are controlled by the addition of heat and moisture only, it is termed winter air conditioning. If the temperature and humidity are controlled by the elimination of heat (cooling) and the removal of moisture (dehumidifying) only, then it is termed summer air conditioning. Systems performing both functions, that is, heating and humidifying in winter combined with cooling and dehumidifying in summer, are termed complete or year round air conditioning systems.

About the only place where the older term, "ventilation" still may be applied is on exhausts for such rooms as kitchens, toilet rooms, boiler rooms, where no air supply is furnished except as provided by leakage from the outside or from other parts of the building. Care should be taken, however, not to apply the term air conditioning too loosely, as it should be used only when the air systems include at least the three essentials of simultaneous content of temperature, humidity and air motion.

Procedure in Cleaning Floors

General recommendations for cleaning floors are given by Chris F. Gies, president of the New York Building Superintendents' Association. They are as follows:

1. Use soft water, the temperature depending upon the type of floor.
2. Use a good neutral soap or abrasive detergent.
3. First brush or vacuum the floor thoroughly.
4. Moisten the surface slightly with clean soft water.
5. Apply the cleaning solution, always being economical in its use.
6. Rinse thoroughly with clean water.

PLANT OPERATION • • • •

Conducted by John R. Mannix and R. C. Buerki, M.D.

Sterilization Based on Temperature Attained and Time Ratio

By E. E. Ecker, Ph.D.

This is the first of a series of articles representing results of research done at the institute of pathology of Western Reserve University and University Hospitals, Cleveland

OPERATORS of pressure steam sterilizers commonly refer to sterilization in terms of pressures without indication of the temperatures attained. Pressure, per se, does not destroy bacteria or their spores. Pressure is required in order to secure the higher temperatures of pressure steam and also to penetrate to the center of each bundle of dressings.

The main factor in sterilization is the temperature, and particularly the temperature of moist heat. It is well known that moist heat, contrary to dry heat, rapidly coagulates bacterial protoplasm, and this is the reason why temperatures of 350° to 400° F. (177° to 204° C.) for one hour or more are required in dry air sterilizers for efficient sterilization.

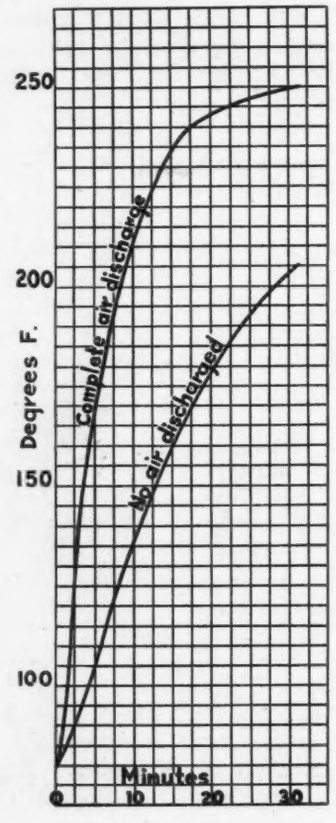
The experiments conducted conclusively point out the necessity for more accurate measurement of the temperature of the steam applied without particular reference to pressure.

The accompanying graph illustrates that the amount of pressure within an autoclave is not a true indication of the temperature attained. Since moist heat is the real sterilizing factor, the temperature is more significant than the pressure.

In this experiment a 2,000 c.c. Florence flask was filled with 1,500 c.c. of tap water and subjected to two sterilizations at exactly 15 lbs. pressure. In one instance the air was discharged by gravity and in the other the air was not discharged.

The temperature of the water was measured every two minutes by means of a Leeds and Northrup potentiometer with thermocouples wired through the autoclave (steam jacketed autoclave 16 by 24 inches equipped with special valving to facilitate a rapid admission of steam). The potentiometer was checked with an accurate calibrating instrument by Leeds and Northrup, and found to be accurate to within ⅓ of 1° at 100° F. and ½ of 1° at 225° and 250° F.

The upper curve in the graph shows the rapid attainment of the full heating value of steam resulting from complete air elimination while the lower curve demonstrates the effect of attempts to sterilize with incomplete air evacuation. The experiment clearly indicates the basic fault in attempts to sterilize by measurement of pressure alone, since in the 30-minute exposure with incomplete evacuation of the air the temperature of the water only reached 205° F. (96° C), while in the first instance the curve was steep and reached the high point of 250° F. (121° C.)



Attention is therefore once more drawn to this most important fact. While sterilization of fluids presents different problems from sterilization of surgical dressings, the general conclusion that pressure alone will not give a true measure of sterilizing effect is equally true of both.

Air and steam do not readily mix and only after a considerable period of time will the air absorb part of the heat of the steam. The penetrating power of the steam is also seriously hampered by the presence of air in the sterilizer. These facts have led to the employment of vacuum pumps attached to sterilizers. Usually 10 inches was the limit and often such machines could produce not more than 5-inch or 6-inch vacuum.

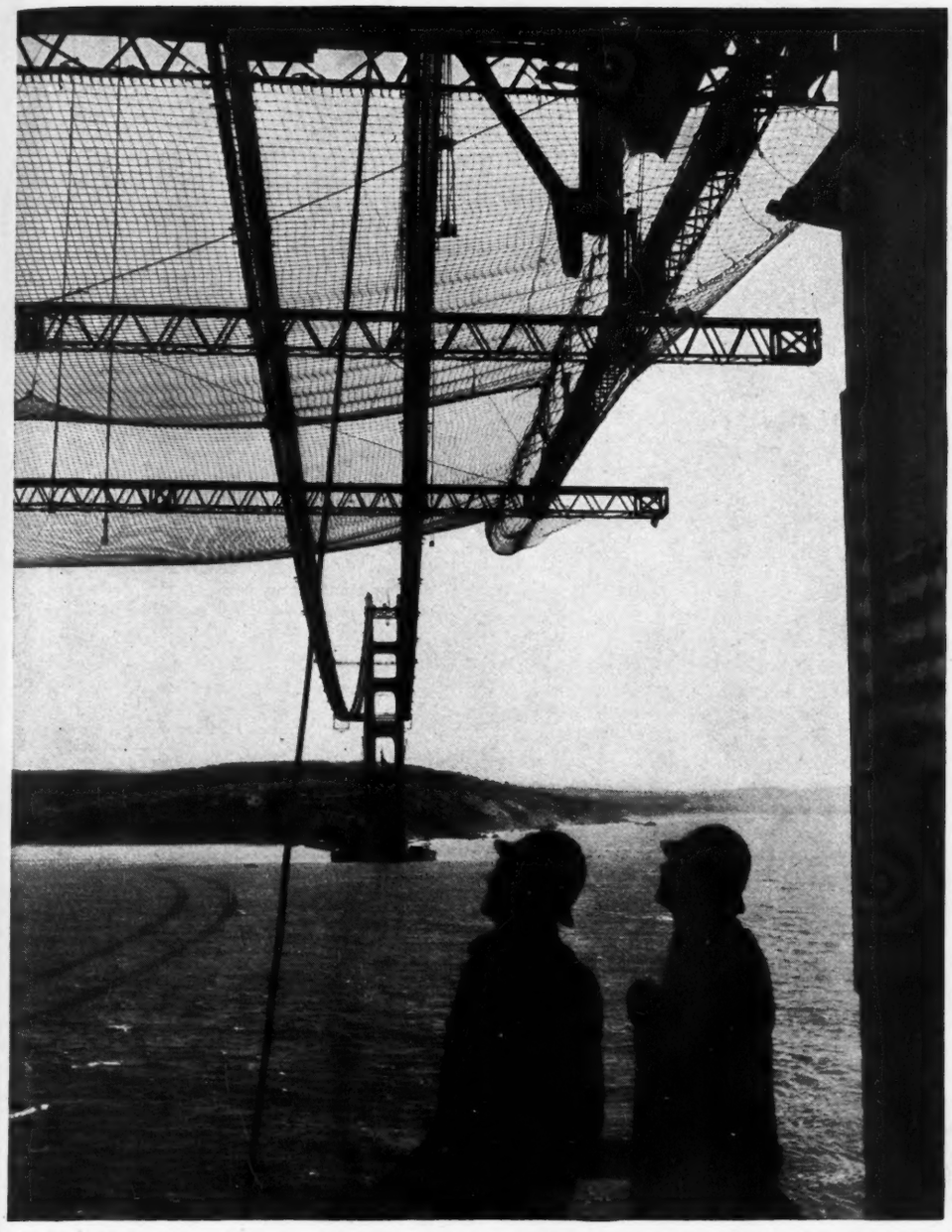
Under this system the air discharge did not exceed one-third to one-half of the total air contained. This also was the reason why pressures of 20 lbs. or more had to be used to secure sterilization. About 1915 it was shown that air could be eliminated effectively by careful regulation of the drain valve from the bottom of the chamber and at present the discharge line temperature control appears to be the safest device yet produced.

Four Organisms Studied

In order to collect further data on the problem of efficient sterilization, a number of bacteriological observations were made by the use of four spore bearing organisms, namely, B. subtilis, isolated from the hand of a nurse, Cl. welchii, B. septicus and Cl. novyi (oedematiens) and finally dried and powdered garden soil.

Four weeks old brain broth cultures of the organisms, free from vegetating cells, were spread over filter paper strips 3 by 1 cm. and allowed to dry at 37° C.

The strips of paper containing the spores of the various organisms were introduced into the center of surgical packs of 20 by 20 by 8 cm. in size. Similar strips were also placed in sterile petri dishes (5 cm. in diameter) and the materials were exposed to steam temperatures varying from 215° (101.5° C.) to 250° F. (121° C.) at 5° intervals. Care was taken to place the surgical packs in a vertical position and in one of the packs the thermocouple wire was inserted. It was, however, difficult to insert the wire in the petri dishes because of the possibility of steam entering and air escaping.



Twelve lives saved by $92,000 "safety net" under world's largest suspension bridge

At dizzy heights far above San Francisco Bay, bridge builders, ant-like, are rearing the world's champion suspension bridge — the "Golden Gate." On perilous bits of slippery steel — in blinding sunshine, impenetrable fogs, gale-like blasts and freezing cold — they work on like beavers — with the *assurance* that the best of human forethought has been given to their safety.

Solely to *protect* them, a huge "safety net" — 125 feet wide, almost a mile long — has been spread below them. It cost $92,000. It has been well worth the cost. Its value is beyond *any* price — twelve lives have already bounced to safety on it.

SAFETY AT NO ADDITIONAL COST

ACCEPTED AMERICAN MEDICAL ASSN.

Where human life is concerned relative safety should be abhorrent if assured safety can be achieved. In dextrose solutions assured safety can be, and is, achieved with Saftiflasks.

40 years of experience in the production, under government license, of products for intravenous injection, have taught Cutter technicians to take no chance with human life. They know that no solution for intravenous injection is safe until *proven* safe by meticulous bacteriological and physiological tests.

To be sure, skilled hands, masters of intricate equipment and apparatus, guided by minds trained for years in their own particular branch of science, are responsible for each exacting step in the preparation of dextrose and other solutions in Saftiflasks.

But, *despite* exacting care in production — no Saftiflask can reach your hands until the lot of which it is a part has been *proven safe* by rigid chemical, bacteriological and physiological tests put on by testing experts entirely divorced from the production group.

Then, as a final precaution — to give you visible assurance that the solution has not been accidentally exposed to contamination — every Saftiflask is doubly safety-sealed; by vacuum, and by an easily removed viscous seal.

And what do you pay for this assurance that every possible care has been taken to make your dextrose solutions safe? Actually, on the basis of direct costs alone, these ready-to-use solutions in Saftiflasks are less costly than those prepared from concentrated ampules. And, when all of the indirect costs are carefully evaluated, they will be found to be no more costly than those prepared from raw chemicals.

Saftiflasks are available from strategically located distributors throughout the United States. The Cutter Laboratories (U. S. Govt. License No. 8), Berkeley, California and 111 No. Canal Street, Chicago. Members of Hospital Exhibitors Association.

CUTTER 40TH ANNIVERSARY STANDARD

Safti flasks

It is probable that many bacteriological observations recorded on the question of sterilization temperatures must be considered erroneous because of the exposure of vegetating cells (not spores) and the use of glass containers. The presence of entrapped air in these circumstances is bound to give inaccurate temperature readings. Even if the heat is conducted through the walls of such glass containers the sterilizing capacity would be materially reduced by lack of moisture of pure steam.

Following the exposures to steam, the strips of filter paper were removed with strict aseptic technique and introduced in brain broth tubes 12 by 2 cm. and filled to 3 cm. below the border of the tube. In the case of the pathogenic organisms, the media prior to the introduction of the filter paper strips were boiled for 15 minutes in order to drive off the air, then cooled, and the tubes sealed with sterile vaseline. The cultures were examined at various intervals up to a period of two weeks. In cases of growth the cultures were further examined for purity. Unheated control paper strips gave growth within 48 hours.

Killing Heat Determined

In this series it was found that the spores of Cl. novyi were the most resistant and survived an exposure of 5 minutes at 230° F. (110° C.), but not 15 minutes at the same temperature. The spores of B. septicus resisted a temperature of 220° F. (104.5° C.) for a period of 15 minutes, whereas, at 225° F. (107.5° C.) for a period of 5 minutes the cultures remained sterile. Cl. welchii survived an exposure of 15 minutes at 215° F. (101.5° C.) while at 220° F. (104.5° C.) the spores were all destroyed in the short period of 5 minutes. B. subtilis was killed at 215° F. (101.5° C.) in 10 minutes.

As was to be expected, different results were obtained when the organisms were enclosed in the petri dishes and at temperatures indicated outside the dishes. B. subtilis spores survived 15 minutes' exposure at 230° F. (110° C.) and the same is true of Cl. novyi. These organisms were killed at 240° F. (115.5° C.) for 10 minutes. Cl. welchii's spores were killed at 220° F. (104.5° C.) in a period of 10 minutes and the spores of B. septicus at 215° F. (101.5° C.) in 15 minutes.

It is, therefore, evident that the steam of the same quality as that outside the dishes is not encountered within the petri dishes. The sterilizing condition inside the dishes must be variable because steam may evacuate the air in part or not at all. From these results it may be concluded that the spores of the organisms employed, when exposed to steam in the autoclave in the usual surgical packs, do not survive 230° F. (110° C.) for a period of 10 to 15 minutes. This temperature is much lower than the temperature traditionally considered adequate.

These data closely agree with those reported by Underwood.[1] It seems probable that the persistent reference to pressure instead of temperature in conducting sterilization of surgical appliances may be responsible for this error. It must here be added that organisms or their spores embedded in vaseline or mineral oil because of lack of moisture require higher temperatures or prolonged sterilization for their destruction.

Since soil contains both aerobic and anaerobic spore-bearing and non-sporebearing organisms, it was thought of interest to use soil as a control of sterilization. Several European workers have used soil for this purpose.

Spore formers of the soil are generally more resistant than the common pathogenic spore bearers so that the use of soil introduces an additional factor of safety. In hospitals with well equipped laboratories and trained technicians a periodic check of sterilization by the employment of soil can be easily performed with the routine media available. The soil test will give a safe biological index of sterility.

In the use of soil as a control of sterility, we have placed one-gram samples of air dried and powdered garden soil in paper packages, and the packages were inserted in the center of laparotomy sets, drums, maternity supplies, and exposed whenever possible at the coolest part of the autoclave (bottom and outlet).

Too Much Heat Destroys

After varying periods of exposure the packages were opened under strict aseptic precautions and the entire contents of each package cultured in brain broth. The soil used in these experiments resisted 11 hours' exposure in an Arnold sterilizer. Exposures of these packages at 240° F. (115.5° C.) for periods of 60, 45, 30 and 15 minutes were found to be sufficient to sterilize this particular sample of garden soil. When the packages were inserted into laparotomy sets, placed on end, and exposed at 240° F. (115.5° C.) for a period of 30 minutes, sterility was accomplished.

Concerning the drums, we may say that of five packages of soil exposed at 240° F. (115.5° C.) for a period of 30 minutes, one showed growth but an exposure period of 45 minutes at the same temperature was sufficient to sterilize the soil. For maternity supplies (baby shirts, diapers, receivers) we found that 15 minutes at 240° F. (115.5° C.) was sufficient. These materials are usually loosely packed and steam penetration is therefore optimal.

Soils vary in their resistance to moist heat and therefore a uniform and fairly resistant soil must be used. Even the most resistant spores, like those of the common aerobic and saprophytic micro-organism, B. mesentericus, are destroyed according to Globig[2] at a temperature of 122° C. (251.6° F.) in a period of 10 minutes or at 126° C. (258.8° F.) in a period of 3 minutes. Spores of most of our pathogenic anaerobic micro-organisms are destroyed at much lower temperatures. Murray and Headlee[3], for instance, have shown that spores of B. tetani are destroyed in a period of 10 minutes (moist heat) and a temperature of 100° C. (212° F.) provided that the pH ranged between 6 and 10.

In Europe and elsewhere, pressures of 3 atmospheres (134° C. = 273.2° F.) and a period of 1½ to 1¾ hours have been employed (Walbum[4]). Such temperatures and exposure times are expensive, time consuming and highly destructive to materials. High temperatures should be used only when the period of autoclaving is greatly shortened. At 3 atmospheres, Walbum found that 10 minutes is ample and this author employed a highly resistant soil as a control of sterilization.

Walbum, using this resistant soil as a control in an autoclave packed with surgical and other materials, gives the following figures for time and temperatures necessary for complete sterilization:

Absolute Pressure in Atmospheres	*Temperature*	*Time of Steril.*
1.25	106°C. (222.8°F.)	4—5 hours
1.50	112°C. (233.6°F.)	1 hour
2.00	121°C. (249.8°F.)	30 min.
3.00	134°C. (273.2°F.)	10 min.
4.00	144°C. (291.2°F.)	5 min.

We have also found that a temperature of 121° C. or 250° F. for 30 minutes is more than sufficient to sterilize our sample of garden soil. A temperature of 240° F. (115° C.) and air exposure time of 15 minutes also sterilized the soil provided that the exposure was made in loose packages and not in drums. When metal drums are carefully packed to allow free steam circulation, a temperature of 240° F. (115° C.) and 45 minutes was necessary to sterilize five samples of soil at the coolest parts of the autoclave. At 250° F. (121° C.) the same result could be accomplished in a period of 30 minutes.

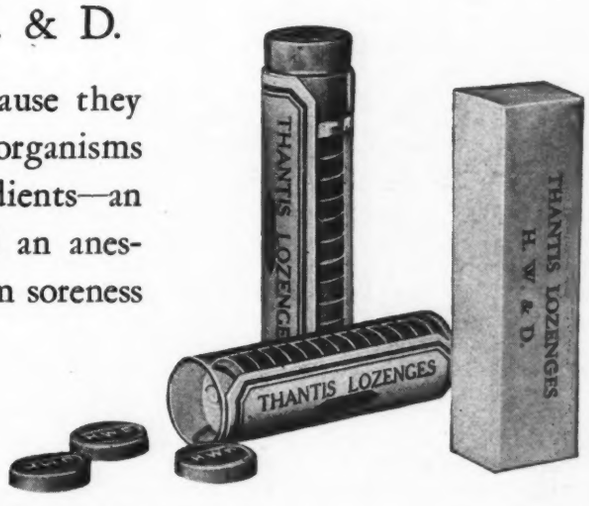
From these results we may conclude that by virtue of cheapness, possibility of an accurate standardization of technique, amplitude of safety and a more natural form of control, soil should be used to check conclusively the results of sterilization.

Various commercial devices have been offered to indicate adequate sterilization. These devices are all based on color changes or the fusion of the inductor. Their turning points have not been standardized and they all vary in their time-temperature ratios to secure a complete color change of

For the relief of various throat affections common in winter many physicians regard Thantis Lozenges, H. W. & D., as one of the most useful agents

THANTIS LOZENGES, H. W. & D.

are helpful in the control of such infections because they reduce the number and viability of pathogenic organisms present. The lozenges contain two active ingredients—an antiseptic (Merodicein, H. W. & D., 1/8 gr.) and an anesthetic (Saligenin, H. W. & D., 1 gr.). Relief from soreness and irritation is provided by the action of these drugs on the mucous membranes of the throat and mouth.



Complete information and literature on request

HYNSON, WESTCOTT & DUNNING, INC.

BALTIMORE, MARYLAND

the chemicals. One device, A, changes its color with the least exposure to steam at a low temperature and continues to change at an apparently uniform rate with increased temperature and time until completely changed, although variations have been found in which no complete change occurred at such a high temperature as 255° F. (124° C.) for 15 minutes.

Again, in one instance the same color was observed at a temperature of 230° F. (110° C.) and 15 minutes exposure. Some of these intermediate color changes may be confusing to the operator. A newer form of this A indicator now changes completely at a temperature of 250° F. (121° C.) and an exposure period of 20 minutes. A second type of indicator, B, did not change until exposed at a temperature of 255° F. (124° C.) for a period of 15 minutes.

A third device, C, was found to change at temperatures of 252° to 253° F. (122.5° C.) in a period of 2 minutes. The lag here is obviously too short. At 245° F. (118.5° C.) the lag was found to be 5 to 10 minutes, and at 240° F. (115° C.) the lag ranged between 10 and 15 minutes. A recent one showed a lag of 5 minutes at 250° F. (121° C.).

All our temperature readings have been taken with a thermocouple and potentiometer and not by maximum and minimum thermometers which show only the final temperatures attained. If we standardize temperature and time of sterilization, the limitations should be considered safe only for that type of sterilizer in which the quality of the steam is correctly and accurately determined by a dependable temperature measuring device such as a thermocouple and potentiometer, a mercury thermometer or other thermo-responsive device, and a warning should be sounded against the use of any temperature measuring device which has not been standardized or is subject to fatigue, such as the cheaper forms of thermometers.

It has been clearly established that the quality of steam used can best be determined by measurements taken at the point of the chamber discharge.

Conclusions

Safe sterilization can only be accurately defined on the basis of actual temperature attained. Operators of sterilizers usually place erroneously all confidence on the final pressures observed. Pressure, per se, does not indicate temperatures sufficient for the destruction of micro-organisms. As has been shown, two distinct temperatures 205° F. (96° C.) and 250° F. (121° C.) may be obtained under exactly the same pressure (15 lbs.) except that in one instance (205° F.) the air evacuation was incomplete.

Temperatures of the steam used in sterilization must be measured accurately.

Spores of pathogenic anaerobes show greater resistance to steam sterilization in enclosed glassware as compared with the same organisms enclosed in surgical dressing packs of 20 by 20 by 8 cm. A temperature of 250° F. or 121° C. for a period of 30 minutes is sufficient to destroy the very resistant nonpathogenic spore bearers of garden soil. The spores of pathogenic anaerobes are destroyed at lower temperatures 15 to 20 minutes at 240° F. or 115° C. This temperature and time ratio is not applicable to contaminated materials embedded in vaseline, oil or wax.

References

[1]Underwood, W. B.: Textbook of Sterilization, American Sterilizer Co., Erie, Pa., 1934.
[2]Globig: Zeitschrift für Hyg., 3: 331, 1888.
[3]Murray, T. J.; and Headlee, M. R.: Jour. Inf. Dis., 48: 436, 1931.
[4]Walbum, L. E.: Zeitschrift für Hyg., 112: 281, 1931.

For Oxygen Administration

By J. Argyll Campbell, M.D.

THE box mask and face tent illustrated here are the same in size and shape and work on the same principle.

The box mask (Figs. 1 and 2) is made either from light cardboard or

Fig. 1

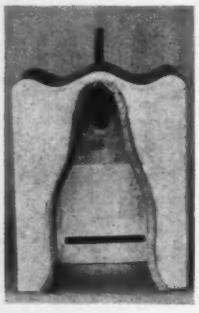


Fig. 2

from thin aluminum. The face tent consists of a light wire frame (Fig. 5) supporting a closely woven linen or other similar covering. The aluminum mask weighs about 100 grams and the face tent less than 40 grams. The former is the more durable and more suitable for general use, but the face tent is of value for frail or aged patients.

Photographs by courtesy of L. W. Collison, National Institute for Medical Research.

The linen of the face tent may be moistened with water and the evaporation of this will tend to cool the apparatus. Its wire frame is collapsible and this saves space in transport.

The advantage of a cardboard mask is that it may be improvised from a light cardboard box and a rubber tube in about ten minutes. If the inlet tube for oxygen is placed in the correct position it works as efficiently as the aluminum mask, but of course its life is shorter. Sticking plaster should be used to render the upper part of the cardboard mask airtight.

The two methods of oxygen administration in common use are (1) some form of tent or chamber and (2) some modification of the catheter method. All these various apparatuses have advantages and disadvantages. The box mask and face tent have been introduced to endeavor to improve general conditions for the patient, to simplify matters for the nurses and to reduce markedly the daily running expenses. With the box mask or face tent no skilled attention is required as no analysis has to be done. A steady constant flow of oxygen at the desired rate is obtained with a flow meter, and a standard automatic regulator for the oxygen cylinder, as shown in Fig. 3.

A general description of the aluminum box mask will suffice also for the cardboard box mask and linen face tent. When in position on the face the mask has a capacity of about 1,000 cubic centimeters. Its length is about 15 centimeters, its breadth 12 and its depth 7. The long axis of the mask lies in the long axis of the face while the plane of the breadth of the mask is parallel with the plane of the mouth. The plane of the depth of the mask is nearly at right angles to the plane of the face (Fig. 3).

The back of the mask (Fig. 2) has a bottle shaped opening to accommodate the nose, mouth and part of the chin. The edge of this opening is lined with rubber cloth to lessen friction. The mask is made fairly airtight at the top half of the back by

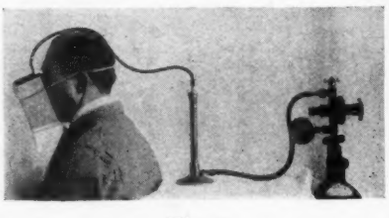
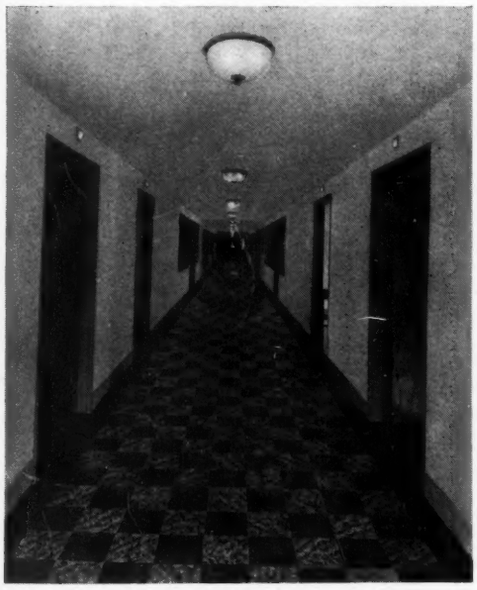


Fig. 3

FLOORS ARE NO PROBLEM IN THIS HOSPITAL

Linotile and Accotile keep rooms and halls cheerful, quiet, and comfortable in Oneonta Hospital

Living-room in the Oneonta Hospital Nurses Home. Attractive floor is Armstrong's Accotile in alternate tiles of Sea Green Marble No. 315 and Ebony No. 305. Thirty thousand square feet of Accotile and 56,000 square feet of Linotile were used in this hospital.



Main corridor, Oneonta Hospital, Oneonta, N. Y. Floor is Armstrong's Linotile in tiles of Algerian Red No. 155 and Dark Walnut No. 126, with border of Tourmaline No. 110.

IN hospitals, where strict cleanliness, utmost quiet, and cheerful decoration are essential, floors of Armstrong's Linotile and Accotile offer many advantages.

Linotile and Accotile are resilient, comfortable, and quiet. They are durable—can stand years of wear without showing it. Their non-directional swirl graining, in the marble effects, conceals traffic marks. Scuffing feet and wheeled equipment cannot mar their beauty, because the rich colors run through the full thickness of the tiles.

Linotile and Accotile are economical to install and maintain. The individual tiles can be laid quickly over your old floors, with little or no interruption of hospital activities. A wide range of plain and marble colors permits the creation of hundreds of interesting designs. Daily sweeping and occasional washing and waxing keep Linotile and Accotile fresh and beautiful for years.

In Armstrong's *complete* line, you will find resilient floors for every hospital purpose — and every budget. *Linotile*—an exclusive Armstrong product—is a heavy-duty floor even more resistant to indentation than battleship linoleum. *Accotile* is a low-cost moisture-resistant tile ideal for basement rooms where concrete floors are in direct contact with the ground. *Cork Tile* is a luxurious floor with high sound-deadening qualities. *Rubber Tile* is a specially reinforced floor of attractive high finish. And there are hundreds of attractive patterns in Armstrong's Linoleum. For more complete information, write now for a free, color-illustrated copy of "Handlaid Floors." Armstrong Cork Products Company, Building Materials Division, 1210 State Street, Lancaster, Pennsylvania.

ARMSTRONG'S *Linoleum* *and* RESILIENT TILE FLOORS

LINOTILE · ACCOTILE · CORK TILE · RUBBER TILE · LINOWALL · ACOUSTICAL CEILINGS

gentle pressure against the face, the mask being kept in position by tapes passing over the top of the ears to be tied below the prominence at the middle of the back of the head.

The top of the mask is airtight and carries the tube conveying the oxygen into the mask. With a patient lying in bed the light rubber tubing connecting the flow meter with the top of the mask must be supported from the top of the bed in such a way that there is sufficient slack tubing to permit move-

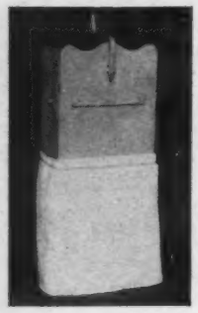


Fig. 4

Fig. 5

ment of the patient without kinking or pulling on the tube. The front and sides of the mask are airtight except just above their lower ends where there are slits (Fig. 1) which serve as emergency exits if the lower end of the mask, which is entirely open, comes into contact with the chest. The top of the mask is slightly curved below the eyes so that vision is free, and in order to avoid glare the top is colored black.

The new principle upon which the efficiency of the apparatus depends is that the end of the inlet tube (internal diameter 5 millimeters) for oxygen is bent back on itself so that the flow of oxygen strikes the middle of the inside of the top of the mask (Figs. 2 and 5). This re-direction of the oxygen flow delays the exit of oxygen from the inside of the mask. The open end of the inlet tube is fixed about 3 centimeters below the top of the mask and is placed far enough forward to prevent touching the nose.

Patient Breathes Easily

The patient breathes the mixture of air and oxygen from the inside of the mask. A certain proportion of air is drawn up into the mask through its lower open end at each inspiration of the patient and this air mixes with the oxygen of which there is a constant flow from above downwards through the mask. The patient's breathing is entirely free as there are no tubes or catheter in the nose and also there are no valves to be opened and closed. Such valves constitute a disadvantage of the ordinary rubber masks and form an obstruction to breathing which may much impede a weak patient.

In the lower half of the front of the mask (Fig. 1) there is a door which may be lifted up for feeding purposes or when using a handkerchief or for expectoration, although the last named may be performed through the lower open end of the mask.

For ordinary cases of pneumonia the mask is run with a flow of oxygen at 6 litres per minute. This raises the alveolar oxygen pressure to 50 per cent of an atmosphere when the head is bent slightly forward in the usual position of comfort for a patient and with the respiratory volume about 7 or 8 litres per minute. For patients with hyperpnoea, a curtain of lint (Figs. 3 and 4) is attached to the lower end of the mask by an elastic band so that it closes the small exits at the front and sides and hangs freely 4½ inches below the bottom of the mask.

There is free exit for the oxygen through the collapsed open end of this curtain and at the same time the curtain increases the capacity of the mask so that the mask retains more of the oxygen. In this way the alveolar oxygen pressure is kept at a high level with a flow of 6 litres per minute in spite of the hyperpnoea; also in these cases higher rates of oxygen flow may be used.

Constant Flow of Oxygen

The same curtain may be employed for cases of carbon monoxide poisoning when alveolar oxygen pressures of 80 per cent are required to remove the poison rapidly from the hemoglobin. This percentage is obtained with a flow of 8 litres of oxygen per minute, when the respiratory volume is 7 or 8 litres per minute. With hyperpnoea higher rates of oxygen flow may be required. The constant flow of oxygen keeps the mask well flushed out and there is no accumulation of carbon monoxide within the mask.

As Professor Yandell Henderson has recommended, a mixture of 5 to 10 per cent carbon dioxide and oxygen is sometimes preferable to pure oxygen in cases of carbon monoxide poisoning and may be given with this mask. The arrangement of the apparatus in Fig. 3 is that for cases of carbon monoxide poisoning. It is not necessary to moisten the oxygen specially because moisture from the expired air condenses on the inside of the mask and this will help to moisten the oxygen.

The running costs, for the same efficiency, with the box mask or face tent work out about half that for either the ordinary tent or the catheter. The box mask has been introduced only recently and its full application has not been tested yet. Its principle might be adapted for certain purposes connected with anesthesia, but care must be taken not to produce an explosive gas mixture with oxygen.

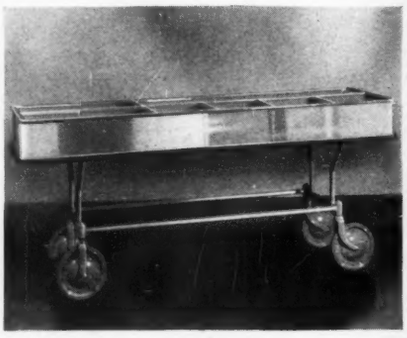
Designed for Fracture Work

By Charles E. Findlay

IT HAS been my experience that the majority of hospitals doing any amount of orthopedic work generally have some sort of an orthopedic appliance cart that has been constructed in the shops of the hospital from worn-out or obsolete pieces of equipment. Many of these assembled carts are noisy and do not serve their purpose.

During the past year we found it necessary to replace some of our obsolete clinical equipment and among the items to be replaced was an orthopedic appliance cart. Our purchasing agent was instructed to secure quotations on the items to be purchased, but much to our surprise, not one manufacturer of hospital equipment quoted on the hospital appliance cart.

Since this particular item of equipment was not on the market, the representative of a well known manufacturer of hospital equipment was asked if his concern would be interested in constructing a cart according



to our specifications. This they kindly consented to do. After many conferences with the doctors on our staff, certain of our hospital personnel and doctors in other hospitals, the orthopedic cart illustrated was designed.

The body of this carriage is constructed of 18-gauge lead coated (terneplate) sheet steel reenforced at its top edge with ¾-inch half-oval molding. A one-inch rubber guard extends around four sides of the body at the lower edge.

The body of the cart is 78 inches long, 24 inches wide, 7 inches deep, and its bottom is covered with a composition mat which prevents the rattling and noise of loose appliances. A removable one-piece tray divided into proper compartments to accommodate the various fracture appliances, fits into the body of the carriage and can be removed to facilitate cleaning.

The frame is constructed of tubular steel, strongly braced and acetylene welded and is mounted on four ten-inch ball bearing disc rubber tired wheels, tire width 1¼ inches, two of which are stationary and two swivel. This construction assures a smoothly moving, easily directed carriage.

"The Spirit of the Nation"

SNORRI

REGARDLESS of schoolbooks which give the impression that Columbus sailed in 1492 toward the totally unknown, Europe had considerable knowledge about America hundreds of years before Columbus—and Columbus, of course, never got to America but only to some outlying islands.

To begin with, Iceland—where the coldest winters, by the way, are never colder than in New York State—was discovered first by Irish, before 850, and later by Norwegians. Having found Iceland, it was then inevitable that Europeans would go to Greenland and finally to the American continent. Greenland can be seen, when the weather is right, from mountains in Iceland, and it stands to reason that man, with enough enterprise to cross a wide and stormy ocean to reach Iceland, would surely go a little farther to another coast within sight.

That was just what happened and Greenland was settled soon after Iceland. It became a republic as early as 990 and, even before that, had commercial dealings with Europe. Falconry was then a sport of kings and the most prized birds were white falcons imported from Greenland.

In sailing to Greenland, a voyager would bear south to avoid the ice packs off Greenland's eastern shore. Ships of those days had difficulty in tacking against a strong wind, and a gale blowing toward the west could have carried a ship to Baffin Island or Labrador. This probably happened many times. The Greenlanders referred to the continent as Vineland.

Lief, son of Eric the Red, went from Iceland to Norway on a visit in 999 and the Norwegian king persuaded him to go to Greenland as a Christian missionary. He tried to sail to Greenland direct, but is believed to have landed first on the American continent before he finally made his way to Greenland.

About 1003, an Icelandic chieftain, Thorfinnur Karlsefni, headed an expedition westward. They landed, probably in Labrador, possibly as far south as New England, and stayed three years. Karlsefni's Greenlandic wife bore the first strictly American child of European parentage, a boy named Snorri.

It's too bad the Karlsefni family didn't stay in America. Snorri might have grown up with the country and helped to create the spirit of the nation.

♦♦♦♦Science and industry today look to the name of Rossville —"the Spirit of the Nation"—for the finest alcohols the world has ever produced. Write for complete details about the type of Rossville Alcohol best suited for your particular purpose.

COMMERCIAL SOLVENTS CORPORATION
TERRE HAUTE, INDIANA
DISTILLERS OF
FINE ROSSVILLE ALCOHOLS, "THE SPIRIT OF THE NATION"
BRANCH OFFICES AND WAREHOUSES IN ALL PRINCIPAL CITIES

Managing the Maids

By Alta LaBelle

When you begin discussing the dissimilarities of hotel and hospital housekeeping you find they mount like an arithmetical progression. Mrs. LaBelle, who was an authority on hotel housekeeping before she accepted the position of executive housekeeper of one of Chicago's largest hospitals, finds the difference in maid service alone to be rather an overwhelming proposition

THE housekeeping department, in both hotel and hospital, is expected to establish and continuously maintain clean, esthetically correct, saleable units. Here the similarity in the two fields comes to an almost abrupt halt, for, with the exception of the maintenance of public spaces—ballrooms, dining rooms, lobbies, in hotels, and amphitheaters, auditoriums, staff units, coffee shops, in hospitals—housekeeping in the hospital presents vastly different problems from those encountered in a hotel.

Individual service must be the keynote of maid service in the hospital. The cleaning of each private room, be it de luxe or moderately priced, presents an individual problem. While the hotel housekeeper can instruct her maids to follow a routine: "Open windows upon entering room, throw back and air bed linens, clean bath, hang up guests' apparel, make bed, sweep, dust, . . . 9:00 to 9:45 a.m.," the hospital housekeeper must give her maids entirely different instructions.

Revolving Around Patients

The patient is the fulcrum around which revolves the cleaning done in a hospital. The maid cannot be given wholesale instructions to open windows, air beds or sweep; the results of such orders might prove disastrous. Before she enters a private room, she is instructed first to learn the condition of the patient—fresh operative, pneumonia, allergic, convalescent. This determines the manner in which cleaning is done. Hospital maids never remove bed linen, make a bed or air it. This is handled entirely by the nursing service.

Routinizing the work of the hospital maid is impossible. She must work around the attending doctor, intern and nurse. Special treatments or tests of the patient may make it necessary for her to stop work in a room after she has begun, and return to it several hours later. This sort of continual interruption may change her work schedule as many as ten times a day, so, although the private room maid is given as many rooms to clean as the hotel maid, they are not assigned to her in any particular order or with definite time allotments.

When a room is a check-out, the maid washes all of the furniture in it with a nonalkaline green oil soap before polishing it. She vacuums the rugs, changes the mattress and box spring covers, the spread, drapes and chair covers. The remainder of the routine cleaning is similar to that practiced in a hotel room.

Ward servicing is entirely different from the same work in the private room, what with anywhere from three to twenty beds in each ward. Where the private room patient has but an attending physician, an intern and a special or floor nurse to interrupt the maid's work, the ward patient has from four to ten doctors at intervals during the day, each accompanied by interns, clinic physicians, technicians and nurses. Because of the many examinations distributed among senior interns, clinic physicians and technicians, these patients are continuously being wheeled to various departments or portable equipment is being wheeled to the patients. The condition of each patient in the ward must be determined before cleaning is begun.

Wards that are divided into cubicles by means of curtains require considerable time from the maid as each curtain must be changed daily. When the ward maid has so many interruptions that she cannot proceed with her regular work, she utilizes her time by cleaning the flower room, dressing room, sterilizing room, utility room and corridors.

Premature nurseries and nurseries can be cleaned in a more routine fashion than any other department in the hospital if the cleaning of these rooms is scheduled during the lax period which follows the care and feeding of the infants. Maids are required to wear sterilized caps and gowns and to keep their hair completely covered when cleaning the nurseries, labor rooms, operating room suites and maternity rooms.

The research laboratories, x-ray department, dental room, basal metabolism unit and occupational therapy department can be cleaned only after the department has closed for the day. Of all of these, the research laboratories present the most difficult and trying problem, for, although it is imperative that they be spotless, the acids, dyes and delicate equipment require guarded handling and only the especially well trained employee can be trusted to clean here.

Dodging as an Art

Dodging becomes a highly developed art among the maids and houseman assigned to clean the out-patient department. With several hundred outpatients going through the clinic for examination, treatment, occupational therapy or interviews, what cleaning is accomplished is performed between dodges. Serious cleaning is attempted only when there are no clinics being held in a given division or when the department is closed for the day.

The radium therapy department and bomb room operate on a twenty-four-hour schedule, which makes servicing them a fine problem. The serum center, with its washed air units, must have its air washed in a careful and sterile manner each morning before the department opens for the day.

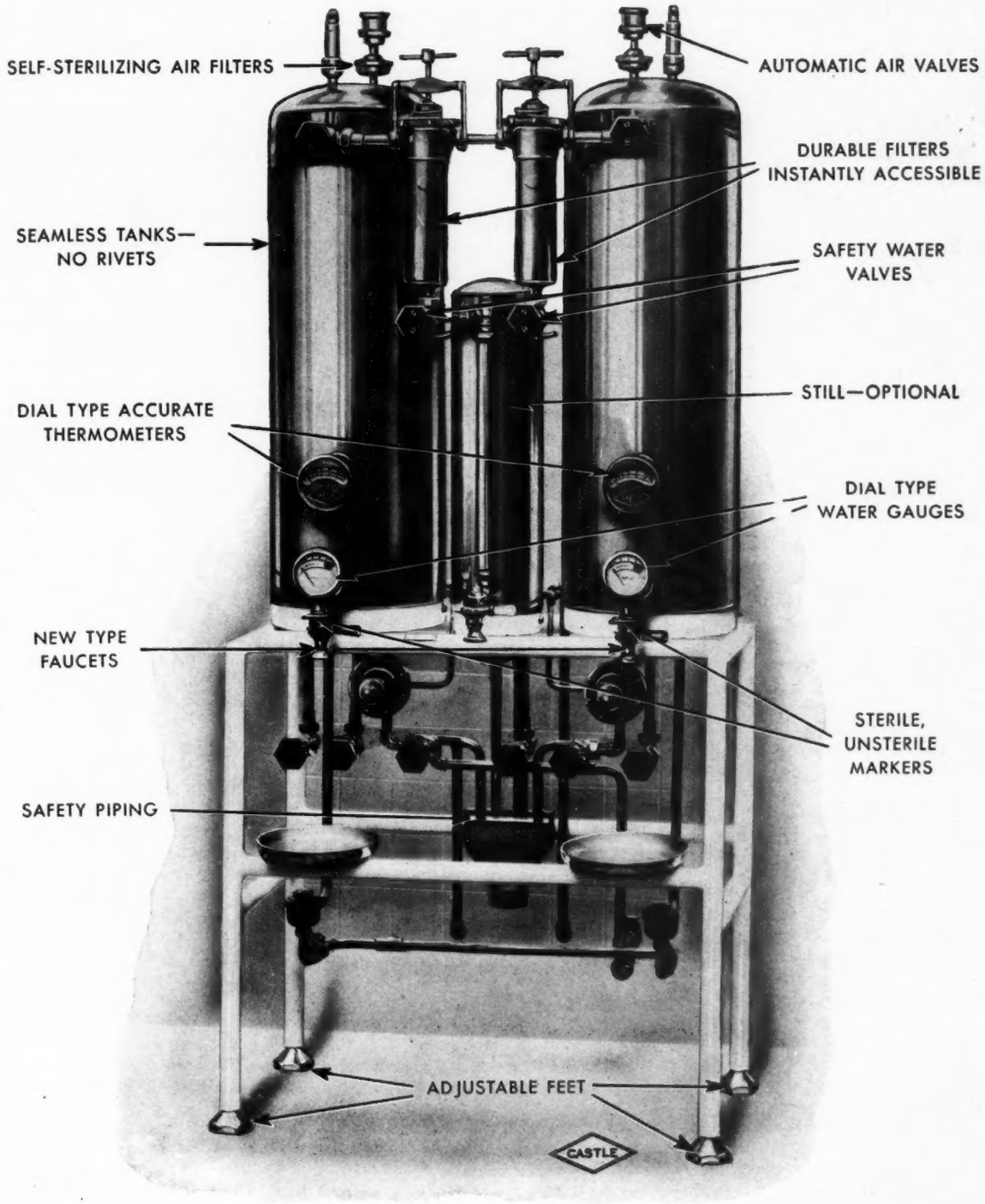
Other departments have their idiosyncrasies—the orthopedic, the mental therapy, the medical library, the ophthalmology, the interns' laboratory—and each idiosyncrasy must be met with cleaning rules as elastic as to time as they are stringent as to cleanliness, for the hospital must at all times be more meticulously cleaned than the finest hotel.

Housekeeping From a Desk

Have you ever thought of keeping house on paper? According to Nora Foley, executive housekeeper who recently spoke on a coast to coast broadcast, most of her housekeeping is done at her desk, on paper. She receives as many reports a day as a factory timekeeper, and has a system of check-ups and records that make it possible for her to know what is happening on any floor of her institution at any time of the day. Miss Foley knows where every maid is, and how far along she is with her work. Housekeeping, she points out, is an executive job, requiring a woman with an instinct for homemaking who isn't afraid to give service.

NEW WATER STERILIZERS *by Castle*

LOOK AT THESE IMPROVEMENTS!



Gone are the gauge glasses with their complicated mechanism for sterilizing the glass. Note dependable dial-type water level indicators mounted on faucets. Automatic air release and air intake with *self-sterilizing* porous glass air filters. Durable laboratory type filters affording large filtering area and instantly accessible for cleaning, complete safety piping, of course. Full information from Castle or their Agents.

WILMOT CASTLE COMPANY • • 1175 UNIVERSITY AVE., ROCHESTER, N. Y.

Selecting Infant Incubators

By A. C. Bachmeyer, M.D. and Fred L. Adair, M.D.

INFANT incubators must fulfill four requirements (1) maintenance of proper temperature, (2) maintenance of proper ventilation or oxygenation, (3) maintenance of adequate humidity, (4) easy access to infant without harmful exposure.

Proper temperature may be maintained either by automatic control or by adjusted manual control. Heat may be supplied either by direct radiation from the heating unit or by indirect radiation as from hot water.

Proper ventilation or oxygenation may be accomplished through provision for an adequate supply of atmospheric air, through a percentage mixture of oxygenation in a closed type incubator in which the gaseous mixture can be controlled, or through proper ventilation and oxygenation supplied to the infant directly by means of a funnel or tube. Adequate moisture or humidity can be supplied through air conditioning which provides for purifying and humidifying the air circulated through the incubator.

The rate of circulation varies from one-half to five cubic feet per minute, depending upon the natural differential in the temperature. The air is filtered through standard filters and is humidified to the required degree prescribed by the physician. Control of temperature and humidity is automatic and each is independent of the other.

Two Types of Incubators Used

Incubators of the following types are used: (1) improvised forms usually supplying heat only through the use of an electric element placed under or above the bassinet, and preferably separated from the bassinet by the interposition of a metal wall or floor, (2) incubators of special design either open or closed which meet the requirements listed above, adopted for an individual infant.

The water jacketed incubator is constructed with double walls, the space between the walls forming the water jacket which surrounds the bottom and four sides of the bassinet compartment, the compartment being covered with a partial lid. These incubators are usually made of copper throughout. Heat is supplied by electrically heating the water in the jacket.

An automatic thermostat should control the temperature of the compartment in which the infant is placed. This thermostat should be of a model that can be set to maintain the different temperatures required from time to time by the changing condition of the infant. As a further protection, there should be a thermometer in the cover of this compartment which will readily indicate the internal temperature.

This type of incubator makes provision for the maintenance of the constant temperature desired, but there is no positive provision for ventilation or oxygenation, dependence being placed on natural circulation or administration of the requisite gaseous mixture by means of a funnel or tube.

The Controls

Heated and humidified incubators are completely closed and of sufficient size to contain the standard bassinet. Heat is supplied either by an electrical element or water electrically heated. Temperature control and humidity control should be by automatic thermostats operated by the temperature and humidity within the bassinet. These controls should be of such type as will permit a nurse to set the different temperatures and the humidity range required from time to time by the changing condition of the infant. Control of temperature and humidity should be automatic and independent of each other.

In some of the larger institutions it has been found desirable to care for two or more infants (usually premature) in one room, individualization of temperature and humidity being sacrificed. The room should be of standard capacity, 250 cubic feet per infant being considered a minimum. At the entrance to the room there should be constructed an air lock so as to prevent sudden changes in temperature when an attendant or physician enters or leaves the room. Temperatures may be maintained by steam coils, electric heaters, or a combination of both, automatically controlled by a thermostat.

Such direct radiation does not adequately provide for proper ventilation. It is preferable that these rooms be equipped with complete air conditioning apparatus, whereby washed air is admitted over the heating mechanism, exhaust air being withdrawn through the ventilating ducts. The air conditioning apparatus should provide for heating, humidifying and dehumidifying by automatic control which can be set according to the prescription of the physician.[1]

[1]This article was prepared for The Hospital Yearbook and will be reprinted in the sixteenth edition, published in 1938.

THE HOUSEKEEPER'S CORNER

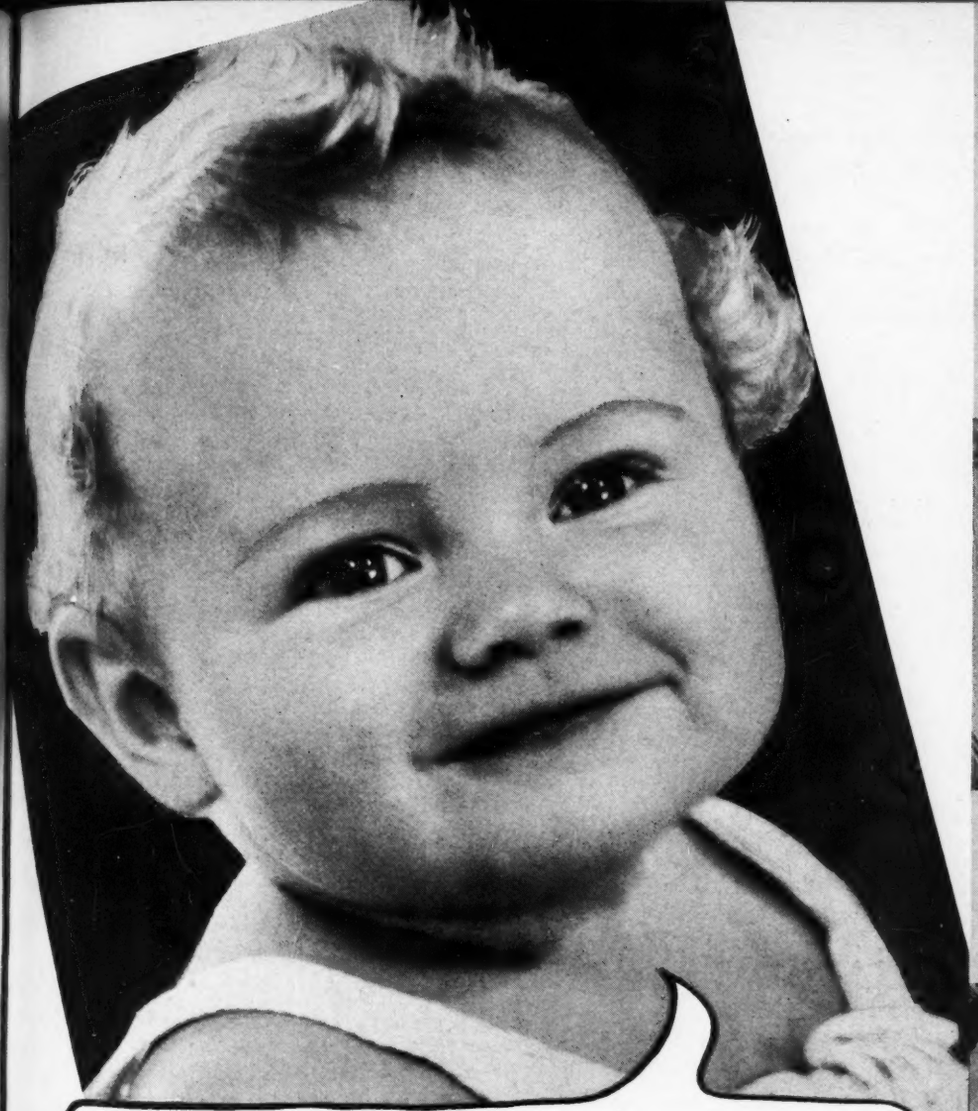
• Every housekeeper should have one ready for reference—the little handbook on hospital housekeeping written by Mrs. Doris Dungan, executive housekeeper of the West Jersey Homeopathic Hospital, Camden, N. J., for the Little Library which is published by the Hospitality Guild, Haviland Road, Stamford, Conn. In it the housekeeper's job as it is required by up-to-date hospitals is briefly summarized, and specific schedules included for each division of the housekeeping department, and for each employee. Mrs. Dungan also answers such pertinent questions as how many employees are needed for a house of given size, how should employees be trained, how much should they be paid and to whom are they responsible. But the book should be read carefully from cover to cover (it won't take long) then placed in the upper right desk drawer for frequent reference. It is that kind of a concise, compact manual.

• Members of the Connecticut chapter of the NEHA are casting their eyes on the floor these days. It is all due to Blanche Newton and the course of lessons she has organized in floor maintenance. The first lesson, held in the classroom at Grace Hospital, New Haven, outlined the early history of the building of floors. It has just come to light that Miss Newton holds a science degree in manual training herself, which with the cooperation of thirty-five or more manufacturers of various floors, cleaners and finishing products for floors makes a combination that is hard to beat.

• To simplify its sorting, linen used at the hospitals of the University of Chicago—Albert Merritt Billings Hospital; Bobs Roberts Memorial Hospital for Children; Gertrude Dunn Hicks Memorial—is marked in colors, different shades identifying different departments. Towels are purchased with borders of the color designating the department in which they are to be used. Other articles are marked with the appropriate color, both in ink and embroidery.

Another use of color evolved by Marie T. Neher, executive housekeeper, plays an important part in keeping linen stainless. On the edges of sheets that may be used in cases where a stain is pretty sure to result, a band of bright red linen, about 1 inch by 4 inches is sewn. The nurse, who seldom has time to read the date of purchase on a sheet in order to select one of proper age, sees the red marker and the newer sheets remain stainless.

• Mrs. Alta LaBelle, Michael Reese Hospital, Chicago, is assembling material on laundry costs per article and on the life of linens and would appreciate having any statistics along that line sent to her.



"MAKE MINE LIBBY'S TOMATO JUICE, PLEASE. IT'S DEPENDABLE FOR VITAMIN C!"

● It may surprise you to learn that all tomato juices are not equally dependable as sources of Vitamin C. But the fact is they vary considerably in their content of this nutritional essential.

Libby's Tomato Juice—the brand whose delicate *gentle press* flavor has won it millions of enthusiastic fans—is made from unblemished, perfectly-ripened fruit. It contains Vitamins A, B, C and G; and being quickly packed by a special process that guards against oxidation, it is a *dependably* good source of Vitamin C.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods

Libby's 100 Fine Foods include Fruits and Fruit Juices, Vegetables, Pickles, Condiments, Canned Meats, Evaporated Milk, Alaska Salmon. Each comes in regular and special sizes for institutions. In addition, Libby packs Homogenized Foods for Babies.

Ideas FROM THE DIET KITCHEN OF A LEADING HOSPITAL

FOR THE GENERAL DIET . . . Tomato Cabbage. Stew 1 qt. shredded cabbage in an uncovered dish with 3 c. Libby's Tomato Juice until very tender. Add 1 tsp. salt and 1 tbsp. butter, and serve, topped with crisp broiled bacon.

FOR STAFF LUNCHEONS or the Diabetic Diet . . . a new Tomato Bouillon. Cook 3 c. Libby's Tomato Juice with ½ bay leaf, 2 cloves, 1 small onion to boiling point; let simmer 5 minutes. Strain, add 1 tbsp. butter, 1 tsp. salt, few grains pepper, same of celery salt. Top with whipped cream.

FOR THE DIABETIC DIET . . . Tomato Cheese Salad. Fill a large mold ½ full of aspic made with Libby's Tomato Juice. Chill. Soak 1 tsp. gelatin in 2 tbsps. cold water and dissolve over boiling water. Add to ½ c. mayonnaise well-mixed with ½ c. cottage cheese. Add this to firm layer of aspic in mold. Chill. When hard, cover

FOOD SERVICE • • • • •

Conducted by Anna E. Boller, Rush Medical College

A Dietary Department Grows Up

By Mary E. Smith

The guest dining room at Memorial Hospital as it appeared on Thanksgiving Day, 1936. Here meals are served to patients' friends.

IMPROVEMENT in dietary department methods and increased demands on the dietitian's time have both come about so gradually in this hospital that it is hard to realize the many changes that have taken place over the past ten years.

In 1926 the Memorial Hospital, Houston, Tex., had one dietitian who did no buying and no teaching. The central kitchen was much as it is today with two cooks and one vegetable boy assisted by the dining room maids. One Negro woman cook has been with the institution twenty-seven years and she is excellent.

There were four dining rooms, one for each of the following groups—staff, student nurses, white orderlies and engineers and colored help. The floor service pantries were equipped with old-fashioned steam tables and all food for patients was sent up on one dumb-waiter. Each floor service pantry had one colored maid and nurses from each unit were assigned from day to day to serve trays with the assistance of the maid. There were in the department no printed forms for menus, diet orders, special diet charts, no such equipment as has now become an almost unnoticed part of the dietary routine.

There are now four dietitians in the department—the head or administrative dietitian, the dietitian in charge of all tray service, the dietitian in charge of the central diet kitchen and formula preparation and the assistant administrative dietitian whose chief duty is to take care of all clerical work in the department.

The administrative dietitian does all the buying and a complete system of cost accounting is in operation in the department. Two recent improvements in this phase of the department work were dispensing with weekly pay rolls in favor of a semimonthly pay roll which tends toward a more comparable per capita cost, and the institution of a perpetual inventory system in both the general food storeroom and cold storage, which gives a much closer check on receiving and issuing of supplies.

In the central kitchen stainless steel is rapidly replacing all other materials for both large and small equipment and all closed cupboards are giving way to open metal shelving with ball or bell shaped feet. A room was recently equipped for making ice cream with the installation of an electric freezer and a large hardening cabinet. All ice cream for the hospital and the hospital drug store is manufactured here, and the hardening cabinet is used for such other purposes as making frozen fruit salads.

During the past few years two additional dining rooms have been added to the department. In one of these special diets are served to anyone desiring such service and meals are served to relatives and friends of patients. The second is for the superintendent. The appearance of the nurses' dining room has been greatly improved by discontinuing table cloths in favor of composition rubber table tops in a soft blue. Venetian blinds in old ivory have replaced the window shades and blocked linen drapes in blue and rose add to the cheerfulness of the nurses' meal hours.

Fridays — Receive Salesmen

The administrative dietitian and the therapeutic dietitian have been given an office accessible to doctors and salesmen and in close contact with department activities. The dietitian in charge of accounting has her office in the basement where supplies are being checked in and out. The fourth dietitian stays in the central diet kitchen. Doctors make frequent visits to the dietitians' office and consult with the therapeutic dietitian personally regarding food for their patients. All salesmen are received on Fridays by appointment, at which time orders for perishable supplies for the following week are tentatively placed.

While special diets are handled as individual problems, there is in the department a folio of sample diets. This folio is a great help in teaching student nurses during their service in the department and in discussing diets with doctors.

An out-patients' diet service is a comparatively new feature of the department. Patients, on the advice of their doctors, frequently bring diet prescriptions for the hospital dietitians to interpret. A minimum charge is made for this service.

Floor tray service is now taken care of by two maids in each floor pantry, under the supervision of a dietitian. The food is served from electrically heated food conveyors and electric refrigerators. Hot water plates and silver chilling bowls are used to keep "hot foods hot and cold foods cold" until they reach the patients. All nourishments are measured in the central diet kitchen and sent up in capped milk bottles ranging in size from gills to quarts. All sweet milk is served in half pint bottles.

Gorham

Hospital Silverware priced exceptionally low . . . . but Gorham craftsmanship in every detail.

Inquiries Solicited

THE GORHAM COMPANY

HOSPITAL DIVISION

NEW YORK
6 West 48th Street

CHICAGO
10 South Wabash Avenue

SAN FRANCISCO
972 Mission Street

An innovation in the tray service which has been appreciated by patients is the custom of serving special trays on birthdays and wedding anniversaries. For anniversaries the husband or wife is invited to be a guest of the hospital and two trays are served in the patient's room. In addition to special foods for the birthday trays, tiny colonial nosegays are used as favors and a small individual brass candlestick holds a birthday candle in a corresponding color. For the anniversary trays a nosegay is the favor for the lady and a boutonnière for the gentleman. Extra expense for these and other tray flowers and decorations is defrayed by the sale of egg cases, scrap tallow and empty bottles. These trays are illustrated on page 106.

Perhaps the least noticed but most important change in the dietary department is in the relation of the dietitian to the training of student nurses. Originally, because of her full schedule, the dietitian here was required to do no teaching. Lectures in dietetics were given by the regular instructress. There were no laboratory facilities. At present the dietitian gives both lectures and laboratory work in dietetics to the freshmen group and it is hoped that it can be arranged for her to give a course of lecture demonstrations in the preliminary period.

The practical training of student nurses in the dietary department has undergone many adjustments. At present there are four students in the department with an eight-week term of service. A new student comes in every two weeks and the rotating service is arranged as follows: first period, infant formulas; second period, preparation of calculated diets; third period, tray service; fourth period, working of special diets with follow-up work on the floors and preparation of two diet case studies. In addition to her case studies a complete record is kept by each student as to number and types of diet trays prepared during her service.

These are only highlights in the progress made by the dietary department of Memorial Hospital. There have been many other improvements and much remains to be done. The need for dietitians' services and a program for dietary department activities have become much more clearly defined during the past ten years. With continued cooperation from allied professions in the hospital field, this department and other similar departments have a full and interesting program ahead.

How Do You Buy?

By Horace W. Cooper

THE responsibility of providing for and catering to the many thousands of persons, both patients and personnel, housed in state medical and surgical hospitals, mental hospitals, schools for feeble-minded, penal and correctional institutions, requires careful consideration of several points in food purchasing.

The food budget of many state institutions has not been adequate to provide the most desirable variety of foods. I have in mind especially mental hospitals and schools for feebleminded, several of which are below the basic ration minimum for milk, butter, eggs, cheese, tomatoes, fresh fruits and fresh vegetables.

The budget determines the standard of service which the dietary department can give. The superintendent, steward and accountant usually decide upon the budget, which is submitted to the department of welfare for approval. When final allocation of available funds is made, however, we invariably find that drastic revisions must be made and the food item suffers proportionately.

Within certain limits, adjustments can be made in the selection of food, in the utilization of employees' time and in the use of supplies. How far this can be done without interfering with the type of service desired depends upon the level at which the budget was made at the time it was originally submitted.

If the budget was made with a fairly liberal allowance for a variety of raw foods in the high and medium priced brackets, there is opportunity to effect economy by substituting less expensive items of food. If, however, the budget is set up at a lower level it is more difficult to stay within it without seriously limiting variety. Menus can be made nutritionally adequate at a low level of expenditure, but may be so monotonous that appetites are not tempted, food is wasted, the patient does not receive adequate nourishment and the personnel become dissatisfied.

In a period of generally fluctuating food prices, either the budget or the standard will fluctuate also. If the standards set forth in the daily basic ration are to be maintained then due allowance must be made in the budget for possible increased food costs; if the budget must be strictly adhered to in the face of rising prices then we must be prepared for complaints because of a lowering of dietary standards.

Whether food costs can be cut by storing large supplies depends on each hospital's set-up. Putting away food at a time when it costs little against the day when it would cost much more is economy. So is buying in large enough quantities to lower the unit cost appreciably. These economies, however, depend on whether you have the space to store the food without waste.

If Storage Is Inadequate

The problem of inadequate storage can be met in part through controlled purchasing, by negotiating contracts for a one, two or three-month period calling for daily, semi-weekly, weekly, monthly, semi-monthly and ten-day deliveries. Such contracts provide the vendor with the volume on which to quote the best price based upon definite deliveries to be made over a stated period.

Dietary facilities are an important point to consider. It is one thing to make a "good buy" but another thing to utilize that purchase to the best advantage in the kitchen if there are inadequate refrigeration facilities, vegetable preparation space, baking, range or steam kettle equipment or lack of personnel to handle and prepare the item so that it may be served at the table as you had visualized at the time you made the "buy." Therefore, deliberate on your food problem as a whole before jumping at a bargain.

We should analyze the dietary department in every detail as to equipment and service. The layout and the equipment have much to do with food purchasing and subsequent planning of menus for different groups. We may have one large kitchen where all the cooking for all groups is done or the work may be divided among several kitchens. The number of groups, the difference in the cost of food and the service provided for each group must be taken into consideration in purchasing and preparing food as well as in labor cost. The last named is of especial importance in the medical and surgical hospitals.

Study your local markets for wholesale sources for competitive bidding on meats, fresh produce and staple groceries. The purchase of meats and groceries is simplified somewhat through the use of Pennsylvania State Specifications[1] to identify the quality

[1]Pennsylvania State Specifications may be obtained from the Bureau of Standards, Department of Property and Supplies, Capitol Building, Harrisburg, Pa.

The first formula must agree with the baby!

NEWBORNS require breast milk. Deprived of human milk, their nutritional requirements are met by simple mixtures of cow's milk, sugar and water. The milk may be fresh, evaporated, dried, sweet or sour; the sugar simple or mixed.

Whole milk formulas are suitable for most newborns with good digestive capacities. **The amount of whole milk given should approximate ⅔ of the total required calories. And the remainder (⅓) should be in added Karo.** Water is added to the mixture for the fluid intake to be about 2½ ounces per pound of baby weight per day.

Evaporated milk formulas are indicated for newborns with limited digestive capacities. They may be used to advantage in considerably higher concentrations than whole milk for premature, feeble and debilitated infants. ***The added Karo is again one-third of the total required calories.***

Dried milk formulas are suitable for allergic infants who will take only small volumes at a feeding and for babies of allergic parents. Formulas approximately equivalent to whole milk may be made up with water and **Karo added in the same ratio as in whole milk mixtures.**

Acid milk formulas are of particular value for babies with low digestive capacities requiring large food requirements. Acid milk requires no dilution with water. **The amount of Karo required may be added directly to the total volume of acid milk prescribed.**

Karo is an excellent milk modifier of dextrins, maltose and dextrose (with a small percentage of sucrose added for flavor) for both the baby and the budget.

FORMULAS FOR THE NEWBORN

3 Ounces; 6 Feedings

Whole Milk	10 ounces
Boiled Water	10 ounces
Karo	2 tablespoons
Evaporated Milk	6 ounces
Boiled Water	12 ounces
Karo	2 tablespoons
Powdered Milk	5 tablespoons
Boiled Water	20 ounces
Karo	2 tablespoons
Lactic Acid Milk	12 ounces
Boiled Water	8 ounces
Karo	2 tablespoons

References: Kugelmass, Clinical Nutrition in Infancy and Childhood, Lippincott; Marriott, Infant Nutrition, Mosby; McClean & Fales, Scientific Feeding in Infancy, Lea & Febiger.

For further information, write Dept. H-2
CORN PRODUCTS SALES COMPANY
17 Battery Place, New York, N. Y.

★ **Infant feeding practice is primarily the concern of the physician, therefore, Karo for infant feeding is advertised to the Medical Profession exclusively.**

or grade of the item desired. Firms bidding on state institution business are familiar with the grades indicated in the specifications and we experience little difficulty in obtaining competitive bids from reliable sources. Likewise, transportation facilities tend to bring firms one hundred miles or more distant within the local area.

Fruits and vegetables have assumed new importance in the diet in the last few years, due to increased knowledge of the effect of vitamins and minerals upon health. Their importance is further increased by their esthetic value in the diet. Color, so essential in appealing to the eye, comes largely from this group of foods. Since they also take a large portion of the budget the method of purchasing is of great importance.

Because they are perishable and must be disposed of quickly by the commission agent and wholesaler, there are wide price variations over a rather limited period. It is therefore not practical to negotiate contracts to run for a given period. Possibly some institutions in smaller communities have an added difficulty by being limited to one source of supply. In any event, it would be well to contact your fresh produce market in person, so that those with whom you do business are familiar with the quality you desire. After this understanding as to acceptable quality is established, it should be possible to do most of your fresh produce buying by telephone, subject to acceptance or rejection when the goods are delivered.

Beware of "Bargains"

Blights that blemish and spots that spoil may all have the same meaning to the fruit and vegetable vendor—reduced prices—but the careful buyer should know a bad buy from a bargain. Bargains that spoil before you can use them are expensive at any price. We have three or four sources in Allentown and we solicit bids two or three times weekly, mostly on the three time basis, Tuesday, Thursday and Saturday.

Beef, lamb, mutton and veal are usually bought by the carcass or quarter, rather than by wholesale cuts, although we are inclined to buy the cuts when purchasing pork. For the large hospital and institution the using up of cheap cuts is not a problem and the carcass method is undoubtedly cheaper in the long run.

For medical and surgical hospitals however, the buying of wholesale cuts may be a better plan. Offsetting the higher price paid per pound is the cost of the labor of cutting meat as well as the losses incurred in cutting when other than an experienced man is employed as meat cutter. Steaks and chops may be more uniformly cut and give a better yield per pound because the wholesaler is better equipped than the smaller hospitals. The proportions of cheap cuts is greater than the proportions of choice cuts in the animal, and unless you have a ready outlet for the cheaper cuts of the carcass it would be well for you to consider wholesale cuts. Careful supervision and planning are doubly essential in smaller hospitals in order that all of the purchased carcass may be used while it is still fresh.

When Buying Meat

In the purchase of meats, I recommend embodying in the purchase proposals the requirement that all deliveries be federal graded and that Bureau of Agricultural Economics grading certificate be furnished with each delivery. This is the procedure in our large hospitals and institutions and should be feasible in several of the hospitals in the medical and surgical group even though their individual purchases may be small.

This may be accomplished by negotiating contracts for a one, two or three-month period for weekly or semiweekly deliveries with the nationally known packing organizations maintaining branch houses in your locality. The meat contracted for would be graded at Chicago or other point of origin of the car being shipped to the local plant for distribution.

The federal grading service is likewise available for butter, eggs, cheese and poultry. The federal grader is not interested in the price at which the bidder accepted the contract, but rather in the quality called for in the grade specified and the federal agent's decision is based upon the grade factor exclusively. If market prices advance during the contract period the purchaser is nevertheless assured of uniform quality. This was not always the case when federal grading was not a prerequisite. Prior to embodying grading certification in our specifications there were periodic controversies with contractors as to the quality delivered, controversies which in many instances placed the institution at a disadvantage.

Butter and Cheese Grades

Butter and cheese grades are adequately covered by Pennsylvania Specifications Numbers B-56 and C-32 respectively. Both specifications call for 92 score and 90 score grades.

Ten or more years ago, prior to making federal grading a prerequisite in our proposals, we had solicited bids for butter upon the basis of 92 score for the reason that we had occasional runs of off-flavor and cheesy butter when we specified 90 score, especially if the market advanced during a contract period.

Occasionally we brought samples of our butter purchases to State College, and a class in butter scoring was conducted, only to find when the final evaluation was made that most of the institutions were receiving butter one or two points below the score indicated in their purchase proposal. In other words, those specifying 90 score were really receiving 88 or 89 score and those specifying 92 score and even higher—some specified 93—were with but one or two exceptions receiving 90 score and apparently were well satisfied since all complaints were lodged by those receiving butter scoring below 90. It is therefore my sincere conviction that where a grading certificate is required, 90 score butter is adequate for all requirements. It is usually two or three cents less per pound than 92 score purchased upon graded basis.

Likewise, cheese grading 90 score should be adequate for your needs.

Best in the U. S. egg grades are "U. S. Special" eggs, but these are seldom found on the market; more frequently the best grade found is "U. S. Extra," an excellent breakfast egg. Third grade is "U. S. Standard," a general purpose egg. The federal grading service is likewise available for egg purchases and whether you specify "U. S. Extras" or "U. S. Standards" you can be assured of receiving the quality specified if a grading certificate accompanies each delivery.

Poultry is adequately covered in Pennsylvania Specification P-52 and all items may be federal graded.

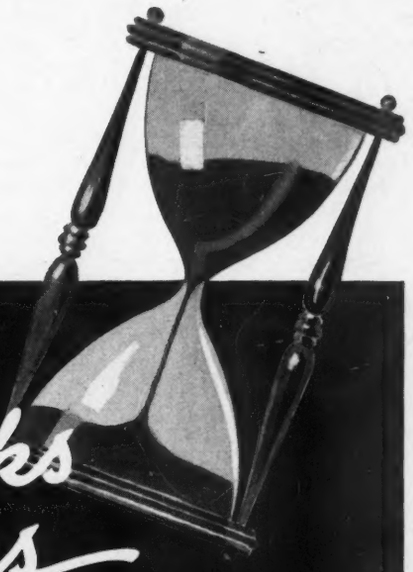
Packing and Distribution

To purchase food intelligently and economically requires a knowledge of packing and distribution, of methods of handling and of the grades covered by Pennsylvania state specifications. The larger institutions and hospitals purchase cereals as well as dried fruits and vegetables in bulk—100-pound bags and 25 and 50-pound boxes—whereas some of the medical and surgical hospitals may be purchasing cereals as well as other items in small packages. The bulk unit is considerably cheaper and contracts for these items can be negotiated calling for monthly deliveries of such items as oatmal, cornmeal, wheat cream cereal, macaroni and the like in 100-pound lots.

Coffee is another item which can be purchased competitively at a substantial saving and at the same time you can be assured of freshness by having deliveries made weekly or semiweekly. Allentown contracts upon the latter basis and the specifications call for the following: 50% Bourbon Santos No. 4 strictly soft; 25% Bogota, Medellin Excelso, full body; 25% Maracaibo, washed, free from earthy flavor shall be whole bean, freshly roasted on day of shipment.

Certain other stipulated requirements must be met by the contractor. On the other hand it is difficult to de-

You'll be glad to know...



that Ralston cooks in 5 minutes

The starch in Ralston is completely gelatinized after five minutes' cooking over an open flame. This ease of preparation makes Ralston doubly desirable since so many nutritionists prefer a hot whole wheat cereal, double-rich in vitamin B. Ralston is

• A WHOLE WHEAT CEREAL . . . with only the coarsest bran removed . . . providing an abundance of the body-building, energy-producing elements that come from choice whole wheat.

• DOUBLE-RICH IN VITAMIN B . . . pure wheat germ is added to Ralston to make it 2½ times richer in vitamin B than natural whole wheat.

• PALATABLE AND ECONOMICAL . . tastes so good that the whole family likes it—and each generous serving costs less than one cent.

The Hot Whole Wheat Cereal Enriched with Extra Vitamin B

RALSTON PURINA COMPANY, Dept. MH, 1765 Checkerboard Square, St. Louis, Mo.

Use Coupon For Free Research Laboratory Report

Without obligation, please send me your Research Laboratory Report on Ralston Wheat Cereal.

Name _____

Address _____

(This offer limited to residents of the United States)

termine whether the roasted coffee bean as delivered is blended exactly in the proportions as called for in the specifications. So bids should be solicited from a selected group of vendors whom you feel are reliable. Nevertheless, when one becomes familiar with the blend a departure can be readily detected. We have used this particular blend for many years for patients, personnel and staff and all comments have been favorable.

The purchase of canned, bottled and packaged foods covered by Pennsylvania classes 60, 61, 62, 63, 64 and 65 is handled through the department of property and supplies. This in itself is all right and should prove economical for the commonwealth as a whole. It is the long range feature which is objectionable—placing purchase requests six to nine months ahead for definite quantities and obligating one's budget so far in advance of known market conditions. Such a purchasing procedure would be less objectionable if we were working upon the basis of a budget figured upon definite varieties of foods, in quantities adequate for a well balanced, attractive and varied diet, which should be maintained, with monetary adjustments to care for any increased costs in food commodities.

We find, however, that we cannot exceed the hospital budget and since the item of food calls for the greatest percentage of total expenditure outside of pay roll, we are compelled to cut by substituting less expensive items of food. We begin by substituting for canned goods the less expensive dried fruits and dried vegetables. So when we are obligated for canned food estimates so far in advance, especially in a rising market such as we are experiencing at this time, we may be wishing that we had some of the canned goods money to convert into other items so that we might get through without a deficiency and without the necessity of cutting our dietary service so drastically during the closing month of a fiscal period.

Two Recommendations

I should like to make two recommendations. The first is to the department of property and supplies on canned foods. The most recent group purchase request for these items was submitted to Harrisburg last July and called for deliveries November 1, 1936, and February 1, 1937. Purchase orders were sent out during the latter part of October for the November 1 delivery but it was December 3 before any information pertaining to samples for inspection and test was received. That means that at least another month will be required before we shall be informed as to whether the several items are accepted. In the meantime we must provide for our people so we draw on the items prior to acceptance.

To obviate this condition, I recommend that the department of property and supplies avail itself of the federal grading service which has been extended during the past few years to include canned fruits and vegetables; that the department embody in purchase proposals the prerequisite that all such items be inspected and graded by the bureau of agricultural economics, U. S. Department of Agriculture, and accepted by that bureau as meeting the grade called for in the state specifications. The receiving agencies would need only to check deliveries for evidence of the B. A. E. grading stamp on each case. The grading certificate itself could be filed at the bureau of standards, department of property and supplies, as a permanent record.

The second recommendation is to the department of welfare and bears upon an adequate budget allocation for food.

Patients and personnel need food that is adequate in all respects. Most of the institutions here represented are providing meals for persons who will receive their food from the institution over a period of years. The diet for this group must be nutritionally adequate and must include a variety of foods that tend to add attractiveness to the food service and zest to eating. The institution may suffer loss, otherwise, through decreasing the efficiency of the personnel and may increase illness among ambulatory working patients and personnel.

Item	*Est. Unit Cost per Lb.*	*Est. Cost of Ration*
Beef	$0.17	$0.0584
Butter	.36	.0315
Flour	.03	.0188
Milk	.035	.0525
Cheese	.21	.0040
Eggs	.20	.0125
Sugar	.05	.0086
Potatoes	.025	.0156
Green and leafy vegetables	.03	.0090
Tomatoes	.06	.0120
Roots and others	.02	.0060
Legumes, beans	.05	.0031
Fruits, canned and fresh	.03	.0045
Fruits, dried	.06	.0056
Coffee	.14	.0075
Yeast	.15	.0056
Salt	.01	.0003
		$0.2555

The food budget for Allentown, as submitted to the department of welfare for the 1937-39 biennium, is based upon twenty-five cents per person per day for the total number of patients and personnel receiving maintenance; seventeen cents purchased and eight cents produced.

These figures were based upon an estimated cost for the daily basic ration as shown above.

The basic ration indicated in the dietary operations cost report has served us well by establishing a minimum basic ration for an adequate and varied diet for patients and personnel. It has also shown serious inadequacies in the diet, for example, butter, milk and tomatoes. Several institutions find it impossible to attain the minimum standards for these commodities due to a restricted budget for purchased food where the production of their agricultural activities is inadequate for their needs.

It is accordingly recommended that the department of welfare use the basic ration as a basis for establishing food budget estimates. Such an estimate may be far from accurate but it would, at least, support the institutions' figures and provide the department of welfare with estimates based upon a definite food program when the budget is submitted for approval to the governor and legislature.

New Way to Store Eggs

Recent improvements in egg storage give much greater protection to eggs than was the case a few years ago. A new method has recently been developed by experts of the U. S. Bureau of Chemistry and Soils which gives promise of improving still more the quality of storage eggs.

The basic problem of egg storage is to prevent the egg from giving off carbon dioxide through its shell and keeping the egg cool helps. In addition, air circulation and humidity must be controlled. Rooms containing eggs should contain no other products since eggs absorb odors and flavors easily through the shells.

The new method of egg storage is to coat the egg with a pure tasteless mineral oil before putting it in storage and to spray carbon dioxide gas on the egg. The oiling and the carbon dioxide do not affect the flavor during storage but help to keep water from evaporating out through the porous egg shell, and foreign odors and bacteria from making their way in. Furthermore, it helps to prevent the loss of carbon dioxide and thus retards the chemical change that takes place when this disappears.

Daily Buying

Rhea Shulman of Menorah Hospital, Kansas City, Mo., has found that because of market conditions, it is more satisfactory to order fresh fruits and vegetables daily rather than weekly or biweekly. In this way she keeps a closer check on the census of the hospital, and can follow the changes more closely. She can also take advantage of the market fluctuations which have been so prevalent the last few months.

CONSERVATION OF ESSENTIAL ELEMENTS IN PROTECTIVE FOODS

II. THE VITAMINS

● Refinement of vitamin assay methods has made practical many quantitative studies which had hitherto been impossible. Employment of these methods has yielded evidence which indicates that many factors may influence the vitamin content of foods which come to the table; in particular, the fruits and vegetables. Variety, maturity, time and temperature of storage after harvesting, and method of preparation, all have been found to affect the ultimate vitamin content of common foods. Several examples of the extent to which certain of these factors operate might well be given.

It has been shown that spinach slowly loses its vitamin C potency even in low temperature storage; at room temperature, one-half of the vitamin C is lost in three days; practically all antiscorbutic potency disappears in seven days (1).

Another report indicates a loss in vitamin C of 78 per cent in spinach stored two days at room temperature and 80 per cent loss in asparagus tips during four days' storage (2).

The vitamin C content of apples is markedly reduced during cold storage: 20 per cent in 4 to 6 months and about 40 per cent in 8 to 10 months (3).

Vitamin A in apples is, however, subject to less destruction than vitamin C during prolonged storage (4).

Prolonged cold storage of pears may result in a loss in the vitamin A and vitamin C content of nearly 50 per cent (5).

Further, solution losses which may occur during cooking vary with the individual product and with the method used in cooking. From 40 to 48 per cent of vitamin C may be lost to the water in which peas are cooked (6).

Vitamin C losses in 12 different vegetables have been reported to vary from 12 per cent in asparagus to 80 per cent in white onions (7).

These data demonstrate the seriousness of solution losses of vitamin C. It is considered probable that other water soluble vitamins are affected in a similar way.

Thus, by the time fruits and vegetables spend some days in transit or storage before reaching the kitchen and are cooked by the usual home method, much of the original vitamin content may have been lost. Little can be done to prevent storage losses when fresh fruits and vegetables are not available from the home garden, but solution losses may in part be overcome by using the cooking water.

Fortunately, in the commercial canning procedure, products are harvested at the optimum stage of maturity and canned immediately, using only a limited quantity of water which is retained in the can. As a result, storage losses of the vitamins are reduced (8), and solution losses may be eliminated by the use of the liquid in which the food is canned.

AMERICAN CAN COMPANY

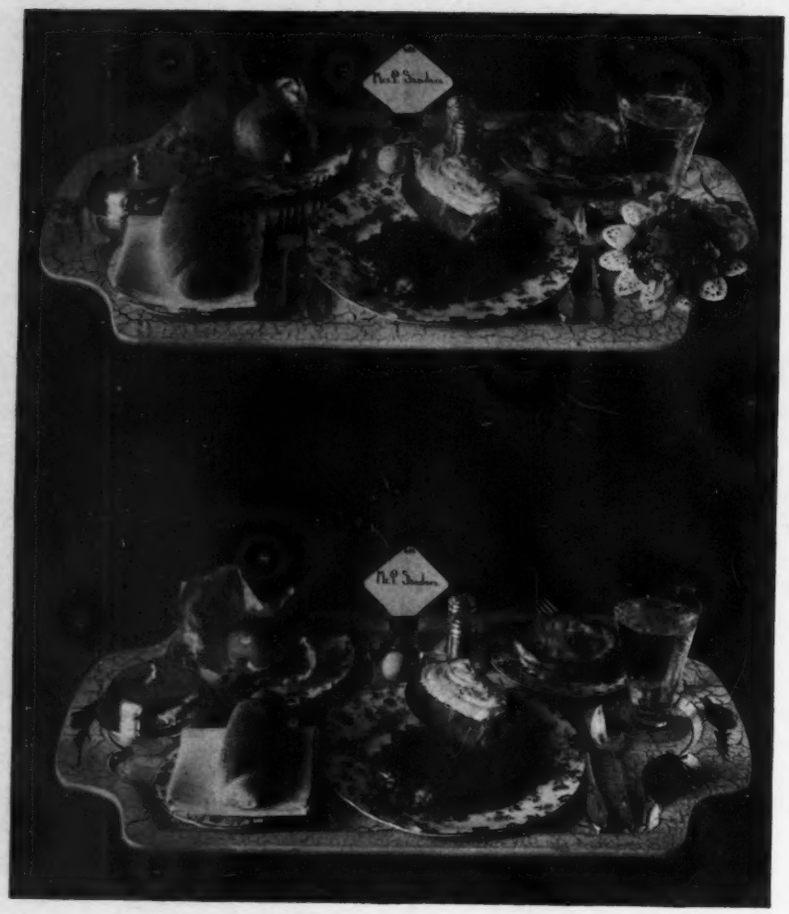
230 Park Avenue, New York City

(1) 1936. Food Research 1, 1.
(2) 1936. J. Soc. Chem. Ind. 55, 153T.
(3) 1933. J. Agr. Res. 46, 1039.
(4) 1936. Food Research 1, 121.
(5) 1934. J. Am. Diet. Assn. 10, 217.
(6) 1936. J. Nutrition 12, 285.
(7) 1936. J. Home Econ. 28, 15.
(8) a. 1921. Proc. Soc. Exp. Biol. Med. 18, 164
b. 1928. Ind. Eng. Chem. 20, 202
c. 1929. Ibid. 21, 347
d. 1932. J. Home Econ. 24, 826

This is the twenty-first in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. We want to make this series valuable to you, and so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles.

The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.

Anniversary Trays



An innovation at the Memorial Hospital, Houston, Tex., is the practice of serving special trays on birthdays and wedding anniversaries. For anniversaries the husband or wife is invited to be a guest of the hospital and two trays are served in the patient's room. Mary E. Smith is the dietitian. An article describing the development of her department appears on page 98.

Birthday Tray

FOOD FOR THOUGHT

• Vera Cox, assistant dietitian at Cooper Hospital, Camden, N. J., tells how guest trays are handled at that hospital. The orders are sent from the floors to the diet kitchen within one-half hour of serving time. The guest trays are the same as those served to the patients on full diets, with some additions such as soup, tomato juice. The charge slip made out by the dietitian gives the patient's name and room number and the cost of the tray. It is sent to the main office to be attached to the patient's bill.

• A recent report from the U. S. Public Health Service National Institute of Health tells how it is possible for a diet to check a growth of breast cancer in mice. However, the scientists, Dr. Carl Voegtlin, Dr. J. R. Thompson and Dr. Mary E. Mazer, emphasize that the report does not necessarily hold out any immediate hope for checking cancerous growths in human beings by diet. The diets used were deficient in the amino acid lysine. However, as lysine is necessary, the problem is whether or not it is advisable to feed a lysine-deficient diet over a long period of time.

• One hospital which does not have a training school has found that there are fewer complaints about the food since the nurses are permitted to smoke in the nurses' dining-room. This same hospital varies its menus by using dried apple griddle cakes served with bacon and syrup for a dessert for cold rainy days. These cakes are ordinary batter cakes with the addition of stewed dried apples.

• Work carried on at the State Agriculture Experiment Station has shown that the vitamin content of cabbage varies greatly. The variety of cabbage grown commonly for summer harvest is much richer in vitamin C than ordinary cabbage. Summer cabbage is richer in this vitamin than orange juice, experiments have shown, while ordinary cabbage contains only about one-half the vitamins usually found in orange juice, when they are compared on a percentage basis.

• Another changed idea about foods was brought out at the meeting of the American Chemical Society. Spinach, which has been used so extensively in children's diets took a scientific setback. It appears that spinach contains oxalic acid which combines with calcium to form a compound which the body cannot use, thus reducing the calcium utilization. This probably will simplify the problem of feeding young children considerably, preventing certain behavior problems which have been attributed to forcing this food upon children.

Diabetic Diets Easily Planned with KNOX GELATINE

Gelatine (U.S.P.) plays an important role in diabetic diets. With a limited assortment of foods that are included in the diet, gelatine will "dress-up" these same required foods into attractive salads and desserts.

It is easy to calculate a diet with gelatine dishes because Knox Gelatine is of known caloric value, being a pure, but incomplete, protein.

Knox Gelatine should not be confused with an already prepared jelly powder which contains sugar, flavoring and gelatine.

Knox Gelatine is scientifically made from selected long, hard, shank beef bones—surpasses minimum U.S.P. requirements—pH about 6.0—contains no carbohydrates—fat content less than 0.1%—odorless—tasteless—bacteriologically safe.

Note to Hospital Supply Buyers:—Knox Sparkling Gelatine is economical—one ounce makes 4 pints. Knox Plain Sparkling Gelatine and Knox Jell, the quality, ready-flavored dessert in six delicious flavors, cost approximately the same as inferior varieties which are not as pure, nor as scientifically made. Why not insist on Knox when you order?

SPANISH CREAM for Diabetics

	Grams	Prot.	Fat	Carb.	Cal.
1 envelope Knox Sparkling Gelatine	7	6			
¼ cup cold water					
1 cup milk	240	7	10	12	
⅔ cup boiling water					
2 eggs	100	13	10		
1½ teaspoonfuls vanilla					
¼ teaspoonful salt					
(Six servings) TOTAL		26	20	12	330
ONE SERVING		4	3	2	55

Heat water and milk over boiling water. Pour cold water in bowl and sprinkle gelatine on top of water. Add to hot milk mixture and stir until dissolved. Separate eggs and beat yolks until lemon colored. Stir gelatine mixture slowly into egg yolks. Return to stove and cook over boiling water until mixture begins to thicken. Remove from stove, add vanilla and salt and chill. In the meantime, beat egg whites until stiff. Fold into congealing jelly. Mold and chill until firm.

KNOX
SPARKLING GELATINE

KNOX GELATINE LABORATORIES
465 Knox Avenue, Johnstown, N. Y.

Please send me diet prescription pads—also infant feeding literature.

Name.....

Address.....

City.....State.....

March Breakfast and Supper Menus

By Frances Berkeley Floore

Director of Dietetics, St. Luke's Hospital, Chicago

	Breakfast		Supper				
Day	Fruit	Main Dish	Soup or Appetizer	Main Dish	Potatoes or Substitute	Salad or Relish	Dessert
1.	Stewed Prunes	Poached Egg	Cream of Celery Soup	Salmon Loaf	Baked Potatoes		Applesauce and Gingerbread
2.	Grapefruit Halves	Bacon	Julienne Soup, Croutons	Mushroom Omelet		Pickled Beets	Peach Mousse
3.	Orange Juice	Scrambled Eggs	Cream of Parsley Soup	Shrimp Salad	Shoestring Potatoes	Fruit Salad, Whipped Cream Dressing	Brownies
4.	Stewed Figs	Sausages		Chicken à la King	French Fried Potatoes	Tomato Salad, French Dressing, Celery Hearts	Prune Whip
5.	Tangerines	Bacon		Broiled Lamb Chops	Baked Sweet Potatoes	Combination Vegetable Salad, Tarragon Dressing	Fruit Cup, Ice Box Cookies
6.	Bananas	Wheat Cereal	Vegetable Soup	Asparagus Tips on Rusk, Cheese Sauce	Stuffed Potatoes		Red Cherries
7.	Apricots	Eggs	Oyster Stew	Assorted Sandwiches		Celery, Olives, Pickles	Fruit Gelatin With Whipped Cream
8.	Applesauce	French Toast With Syrup	Tomato Juice	Chicken Croquettes, Cream Sauce	Rice		Peach Cobbler
9.	Grapefruit	Sausages	Cream of Asparagus Soup	Egg Salad Sandwiches		Olives and Pickles	Baked Apples With Whipped Cream
10.	Bananas	Soft Cooked Eggs	Vegetable Soup	Fruit Salad, Baking Powder Biscuits With Honey			Lemon Sherbet
11.	Orange Juice	Cornmeal Mush With Syrup	Chicken Broth With Rice	Omelet, Mushroom Sauce		Pineapple and Cottage Cheese Salad	Devil's Food Cake à la Mode
12.	Stewed Prunes	Bacon		Canadian Bacon, Spaghetti Italienne		Marinated Vegetable Salad	Tangerines
13.	Stewed Figs	Wheat Cereal	Cream of Pea Soup	Baked Beans With Bread Sticks			Fresh Frozen Strawberry Sundae
14.	Grapefruit	Bacon and Fried Eggs		Shrimp Salad	Potato Chips	Pickles and Olives	Peaches and Doughnuts
15.	Applesauce	Scrambled Eggs		Cold Sliced Beef With Piccalilli	Macaroni au Gratin	Asparagus Salad, French Dressing	Apricots
16.	Bananas	Ham		Creamed Sweetbreads in Pattie Shells	Frozen Green Peas	Waldorf Salad	Date Bars
17.	Orange Juice	Bacon	Tomato Broth	Chicken Salad		Spiced Crabapples	Cherry Pie à la Mode
18.	Prunes	French Toast With Syrup	Cream of Potato Soup	Welsh Rabbit With Crisp Bacon		Head Lettuce, Tarragon Dressing	Raisin Tapioca
19.	Figs	Sausages		Roast Fricandeau of Veal	Hashed Brown Potatoes	Stuffed Celery	Pears
20.	Tangerines	Cornflakes	Vegetable Soup	Hot Chicken Sandwich With Gravy		Pickles	Apricot Sherbet, Ice Box Cookies
21.	Bananas	Bacon	Fruit Supreme	Creamed Shrimps and Peas on Toast	Baked Potatoes		Lady Baltimore Cake
22.	Prunes	Bacon and Eggs	Oyster Stew	Peanut Butter Sandwiches, Relish Sandwiches		Fruit Salad	
23.	Apricots	Scrambled Eggs	Broth With Noodles	Thuringer Sausages	Mashed Potatoes	Head Lettuce, Tarragon Dressing	Pears
24.	Bananas	French Toast With Syrup		Sliced Tongue	Pimiento Creamed Potatoes	Neapolitan Salad	Green Gage Plums, Gingersnaps
25.	Orange Juice	Bacon	Cream of Pea Soup	Baked Tomato on Rusk With Chicken Gravy		Waldorf Salad	Lemon Snow Pudding, Custard Sauce
26.	Figs	Poached Eggs on Toast	Cream of Fresh Spinach Soup	Chicken Salad Sandwiches		Stuffed Olives	Whole Peaches and Angel Food Cake
27.	Grapefruit Halves	Wheat Cereal	Tomato Juice	Deviled Eggs	Baked Potatoes		Grape Ice and Marguerites
28.	Tangerines	Ham		Welsh Rabbit With Bacon Strips	French Fried Potatoes	Fruit Salad, Whipped Cream Dressing	Ice Box Cookies
29.	Bananas	Bacon and Eggs	Beet Borscht	Shrimp Salad With Hard Cooked Eggs, Corn Meal Muffins With Honey			Fruit Cup
30.	Orange Juice	Bacon	Vegetable Soup	Cheese Strata	Baked Potatoes	Pineapple and Date Salad, Mayonnaise	Oatmeal Bars
31.	Grapefruit	Scrambled Eggs		Paprika Schnitzel	Baked Noodles	Carrot, Beet and Pea Salad	Strawberry Bavarian Cream

[1]Recipes will be supplied on request by Anna E. Boller, The Modern Hospital, Chicago.

HOW OVALTINE AIDS GASTRIC STARCH DIGESTION

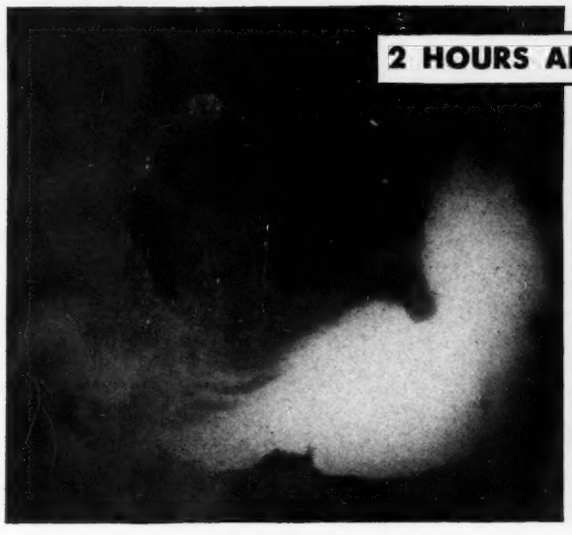


FIGURE 1
STARCH MEAL ALONE

FIGURE 2
STARCH MEAL WITH OVALTINE

THE accompanying x-rays show the relative size of the gastric contents 2 hours after the ingestion of a starch meal alone (figure 1) and a starch meal with OVALTINE added (figure 2).

The average decrease in gastric contents in 12 normal human subjects due to OVALTINE was 20%.

The facilitation of gastric evacuation of starches by OVALTINE took place *in the presence of normal salivary digestion.* This is due to the fact that salivary amylase is inactivated at pH 4.5, whereas malt amylase is not destroyed until the acidity of pH 2.5 is reached. OVALTINE *continued to digest the starch after salivary digestion had stopped.*

Clinical Application

It is not intended that these results be applied to *normal* individuals. However, for the person who bolts his foods without proper mastication, or for the person who suffers from an inadequate secretion of saliva or pancreatic juice, the addition of OVALTINE to the diet is indicated. OVALTINE is an effective and standardized product for supplying additional starch-digesting enzymes in a pleasant and economical form.

Try OVALTINE

If you would like to recommend **Ovaltine** ***... to some patient with faulty starch digestion, we will send a regular size can prepaid. Please address The Wander Company, 180 North Michigan Avenue, Chicago, Illinois. Dept. M.H.2.***

OVALTINE-INSURANCE AGAINST FAULTY STARCH DIGESTION

Copr. 1937, The Wander Co.

NEWS IN REVIEW . . . .

Rosenwald Fund Names Michael M. Davis Head of New Committee; Grants $165,000

Incorporating the Committee on Research in Medical Economics and awarding it a grant of $165,000 over a five-year period, the Julius Rosenwald Fund terminated its department of medical services and announced that the committee will carry on its work in low cost medical care, as the

Dr. Michael M. Davis

American Hospital Association with its $100,000 grant, is doing in the hospital field.

Dr. Michael M. Davis, who has been director of the Fund's department of medical services since 1928, has been named chairman of the committee. He has been associated for many years with work in medical economics and with hospitals and clinics in New York, Boston and Chicago, and he serves as chairman of the council of the American Hospital Association.

Robert E. Chaddock, professor of statistics, Columbia University; Henry S. Dennison, president, Dennison Manufacturing Company; Walton H. Hamilton, professor of law, Yale University, and director, bureau of research, Social Security Board, Washington, D. C.; Elvin S. Johnson, director, New School for Social Research, New York City; Paul U. Kellogg, editor, *Survey Graphic;* Harry A. Millis, professor of economics, University of Chicago, and Fred M. Stein, retired New York banker, compose the committee.

The advisory board will be enlarged as needed. At the present time it has as members Dr. Samuel Bradbury, Philadelphia; Dr. Alfred E. Cohn, New York City; Dr. Alice Hamilton, Washington, D. C.; Dr. Ludwig Hektoen, Chicago, and Dr. Franklin C. MacLean, Chicago.

The committee will conduct and assist studies in the economic and social aspects of medical care; will train personnel for this field, and, in cooperation with the medical profession and other agencies, will furnish information and consultation services in behalf of rendering medical care more widely available to the people at costs within their means. The committee will have its headquarters in New York City.

Surgeon General's Report Shows Lowest Death Rate

The lowest average death rate ever recorded for a five-year period, according to the annual report of the U. S. Surgeon General, was that for the years 1931 to 1935, inclusive, when the rate was 10.9 per 1,000 population. For 1935, the rate was 10.8.

New low death rates were recorded both for typhoid fever and diphtheria in 1935, and the tuberculosis death rate maintained its downward trend. A new low death rate for infants under one year of age was also recorded for the same year, but maternal mortality showed no significant decline.

Deaths have increased in the chronic diseases — heart disease and cancer, for example—and the Public Health Service is increasing the attention devoted to the study of these diseases. Venereal diseases are also receiving more attention, an attitude justified by the fact that syphilis alone ranks with cancer, tuberculosis and pneumonia as a leading cause of death.

A survey of the facilities for medical care, disabling illnesses and physical impairments among 865,000 families in ninety cities and twenty-three rural counties, covering the years 1935 and 1936, is now being analyzed by the Service.

In the twenty-five marine hospitals and relief stations maintained by the Service in 154 ports, 1,904,300 hospital days were furnished and 1,290,000 outpatient treatments were given during the fiscal year. In addition to these hospitals, the Public Health Service also maintains two narcotic farms for the care and treatment of drug addicts and furnishes and supervises medical and psychiatric services in federal penal and correctional institutions.

$445,000 Given to Three Pennsylvania Hospitals

Three Pennsylvania hospitals this month announced the receipt of a total of $445,000 in gifts and bequests.

Montgomery Hospital, Norristown, was given $186,000 in amounts of $66,000, $60,000 and $60,000, to establish as memorials the first, second and third floors of the hospital's new building. The first gift was pledged by the James Lees and Sons Company and the Lees and Eastwick families; the second by Mrs. Horace Coates and her three children as a memorial to her husband, and the third by Mrs. Adam Scheidt and her five children, as a memorial to her husband.

Somerset Community Hospital, Somerset, which was bequeathed $5,000 by the late Frederick W. Biesecker, received that amount from his estate, less than six months after his death.

A trust fund of $254,000 was awarded to the Germantown Dispensary and Hospital, Philadelphia, by the Orphans' Court. The fund was created by Nelson B. Warden in 1924, and was to go to the hospital upon the deaths of members of his family. Mrs. Warden died in 1931 and Mr. Warden last February. The endowment is to be named the Nelson B. Warden Memorial Fund and used for maintenance and charity.

Tropical Disease Laboratory Opened at Bellevue

Persons from all over the world reside in New York City, and the tropics with their diseases are well enough represented to have made the establishment of a laboratory for subtropical and tropical diseases at Bellevue Hospital practical.

The laboratory, which was opened about the first of January, is under the supervision of Dr. Douglas Symmers, general director of laboratories of the Department of Hospitals, and in the joint charge of Dr. Harry Most, New York University Medical College, and Dr. Amanda Hoff, Columbia University, both graduates of the London School of Tropical Medicine. It has already been agreed that the laboratory will participate in the nationwide survey of trichinae being conducted by the Public Health Service.

Among the studies to be undertaken are those on peculiar forms of malaria, including the cerebral variety encountered among the insane; the occurrence of hookwork, especially among Puerto Ricans residing in New York; obscure forms of leprosy; yaw; sprue; Delhi boil; Madura foot; Bilharzia and related fluke diseases; beriberi; the Peruvian wart disease, both amebic and bacillary dysentary and trachoma.

Surgery in the Diabetic

● Insulin has brought radical changes in the surgery of the diabetic because more have survived to develop surgical conditions and because modern treatment allows more of them to undergo reparative as well as emergency surgery. More frequently than not, however, the surgical diabetic demands an early diagnosis and an early operation, and essentially all surgical diabetics require some Insulin.

ILETIN (INSULIN, LILLY)

The first Insulin commercially available in the United States

Time-Tried · Pure · Stable · Uniform

ELI LILLY AND COMPANY

Principal Offices and Laboratories, Indianapolis, Indiana, U. S. A.

Flood Area Hospitals Rise to Emergency as Waters Rise

Factual information on hospitals in the area of what is probably the largest flood in the history of this country, is as difficult to obtain as water in Cincinnati, light in Louisville, or a doctor in Shawneetown. Stories have drifted out regarding the adaptability of hospitals that would be funny if the reason for their adaptableness weren't so tragic.

The Evansville State Hospital, Evansville, Ind., an institution for the care of the mentally ill, moved back several hundred years for the precedent that opened its doors and beds to refugees. With no precedent at all, the Madison State Hospital, North Madison, Ind., may have become a pumping station by now. Its water was being checked by state officials with a view to piping it into Madison when that city's water supply began to give out.

Throughout the six states involved, local physicians and nurses mobilized to establish emergency hospitals. National Guard ambulance units ploughed through mud and water carrying serums and medical supplies to needing communities. Water, gas and electricity were pretty much on a ration basis throughout the entire area. And over all work hung the threat of typhoid, influenza, pneumonia, scarlet fever.

At Shawneetown, Ill., fifty persons were ill with pneumonia, with only one physician available for their care. At Lawrenceburg, Ind., an emergency hospital was set up in a distillery, and seven physicians were caring for 400 patients. It was to here that a National Guard unit brought anesthetics for an appendectomy, serums, and general medical supplies for several expected obstetric cases.

The 2,000 patients at Western State Hospital, Hopkinsville, Ky., were placed on rationed water on January 23. According to Dr. E. L. Busby, superintendent, there was about enough water to last one more day. The pumping plant had been destroyed the day before.

At Covington, Ky., St. Elizabeth's Hospital remained open, with fire department engines pumping water from its basement to keep its fires from being extinguished, and two steam rollers stationed outside ready to provide an emergency supply of steam should the heat in the hospital fail.

Louisville's last power plant failed on Sunday night, and at Frankfort the city health department opened emergency stations to give inoculation shots. At this time, hospitals in these two Kentucky cities do not seem to have been crippled. At Newport, however, the situation became serious when the Speer's Memorial Hospital had to close because of lack of heat. More than 100 patients were transferred in private and army ambulances to schools in Dayton and Bellevue. Most of the patients were quartered in Dayton High School, but twenty-five victims of contagious diseases were taken to a grammar school in Bellevue.

Cincinnati citizens were asked to conserve medical resources and to make no calls upon physicians or hospitals that were not absolutely necessary. Both water and electricity in this city were rationed, though power lines to hospitals were kept clear. All hospitals near the flood area cared for a steady stream of flood victims suffering from exposure. Twenty-four-hour emergency medical and nursing units were established at eight emergency stations.

Of Portsmouth, Ohio, writes a reporter: "Influenza, with ambulances at every block, crowding autos into the curb. . . . Mercy Hospital with twenty-three cases of flu in two hours, mostly children." Residents forced from their homes were crowded into schools and hospitals on the hilltop, and the National Guard rushed twenty additional nurses by bus and trucks loaded with medical supplies to the suffering city over ice-covered, water clogged roads. Another reporter, writing of a trip in a rescue boat told of receiving this message: "There's a sick woman here and we have to get her to the hospital. Tell WPAY."

Six refugees of McKees Rocks, Pa., were admitted to the Ohio Valley General Hospital after being removed from their homes.

Rochester Hospital Service Broadens Its Protection

With a membership of 30,000 subscribers and 25,000 dependents, the Rochester Hospital Service Association, Rochester, N. Y., has decided to broaden the protection it affords. The changes put into effect the first of the year are as follows:

1. Oxygen and serum treatments are included as part of the regular services covered by hospital insurance for both subscribers and dependents.

2. Ambulance service is provided anywhere in the county instead of just within city limits.

3. Out of town emergency hospital service allowance is increased from $5 to $6 a day for subscribers and from $2.50 to $4 for dependents. In both cases the waiting period of one year has now been waived.

4. Private room allowance for dependents is increased from $2.25 a day to $4.

5. Hereafter dependents will make a flat payment of only $2.50 a day additional for full coverage in semi-private accommodations (except for maternity cases among dependents who can obtain full care for themselves and their infants for $3.75 a day). Previously dependents paid one-half the charges for anesthesia, electrocardiagrams, basal metabolism tests and blood chemistry and all the cost of care of the newborn.

6. Subscribers will have the same coverage for maternity care as dependents.

7. Anesthesia hereafter will be covered by insurance only when supplied by member hospitals and administered by a salaried employee. When given by a private physician, the cost is not covered.

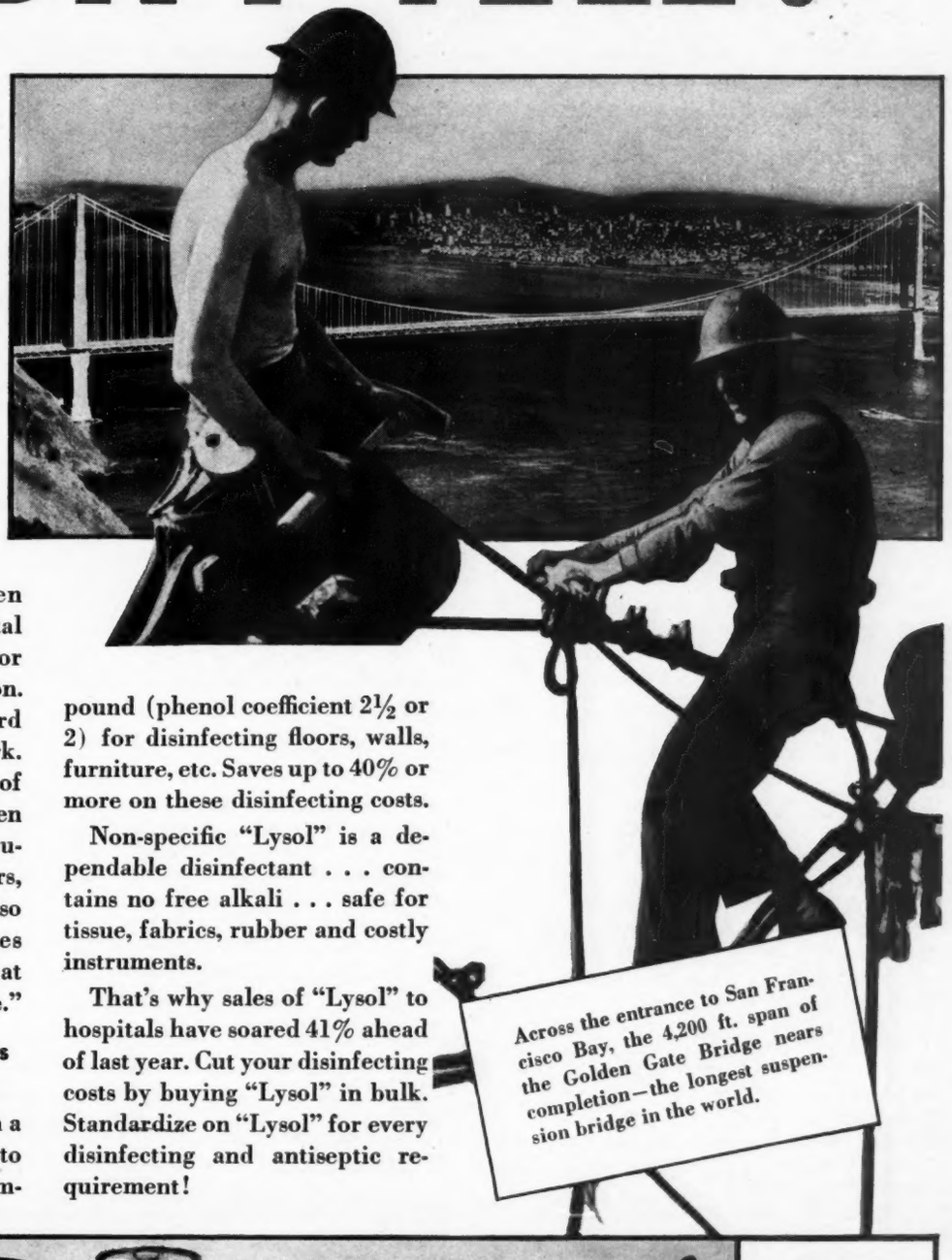
During the nineteen months of its existence the association has paid $134,200 to hospitals of which $98,835 was for subscribers and $35,366 was for dependents. The present membership of 55,000 is distributed among 461 employed groups.

Unemployment will no longer automatically cancel hospital insurance at the end of the contract year for members. The board of directors has given its approval, on an experimental basis, to a new ruling which permits a subscriber to continue his insurance indefinitely during periods of unemployment so long as he meets the premium requirements, provided he is not over sixty-five years of age. The year's experiment will determine whether such a group of unemployed subscribers is a greater risk than those employed.

Surgeons to Rate Specialists

Seven leading surgical associations meeting in Chicago lined up to demand that certain qualifications be met by a surgeon wishing to practice as a specialist. They plan to require six years in graduate study after graduation from an accredited medical school, stringent oral and written examinations and a severe examination in operative surgery. Under their plan, certificates will be granted to those meeting these requirements, by the American Board of Surgery, made up of thirteen members, which will operate under the direction of the Advisory Board for Medical Specialties. Dr. Evarts A. Graham, professor of surgery in Washington University, St. Louis, was elected president of the board.

What the Front Page Story DIDN'T TELL!



Across the entrance to San Francisco Bay, the 4,200 ft. span of the Golden Gate Bridge nears completion—the longest suspension bridge in the world.

The part that "Lysol" played in building the Golden Gate Bridge

ON SUCH vast jobs, with thousands of workers, accidents are inevitable. E. W. Boden, Chief Surgical Assistant of Emergency Hospitals on this great engineering project, wrote—

"Records show over sixteen thousand five hundred hospital treatments without a life lost or even a single case of Infection. This constitutes a world's record in field emergency hospital work. I give "Lysol" a great deal of credit for this. "Lysol" has been used heavily for washing instruments, gloves, basins, sinks, floors, furniture, window sills. I also recommend "Lysol" for cases where they have to be treated at home, and as a home germicide."

How "Lysol" disinfectant cuts Hospital Disinfecting Costs

Concentrated . . . "Lysol" (with a phenol coefficient of 5) goes 2 to 2½ times as far as cresol compound (phenol coefficient 2½ or 2) for disinfecting floors, walls, furniture, etc. Saves up to 40% or more on these disinfecting costs.

Non-specific "Lysol" is a dependable disinfectant . . . contains no free alkali . . . safe for tissue, fabrics, rubber and costly instruments.

That's why sales of "Lysol" to hospitals have soared 41% ahead of last year. Cut your disinfecting costs by buying "Lysol" in bulk. Standardize on "Lysol" for every disinfecting and antiseptic requirement!

As low as **$1.25** per gallon, on 50-gallon contracts, delivered 10 gallons at a time as required

Lysol Disinfectant

REG. U.S. PAT. OFF.

For details address:
LEHN & FINK PRODUCTS CORP.,
Hospital Dept. 2-MH
Bloomfield, N. J., U. S. A.

Copyright 1937 by Lehn & Fink Products Corp.

Chicago's Voluntary Hospital Trustees Celebrate First Birthday of Council

Hospital history was made in Chicago on January 12 when nearly 400 trustees of Chicago's voluntary hospitals were dinner guests of Charles H. Schweppe, president of the Chicago Hospital Council, to celebrate the first birthday of the council. It was the first time, so far as is known, that all of the trustees of Chicago's voluntary hospitals had been invited to a joint meeting.

A high point of the evening was the presentation to Mr. Schweppe of a solid gold certificate as the 1000th member of the Plan for Hospital Care. The presentation was made by Taylor Strawn, president of the Plan for Hospital Care, who said it was to symbolize the appreciation of the directors of the Chicago Hospital Council for Mr. Schweppe's untiring efforts in creating the council.

Addresses at the dinner were made by Dr. Robin C. Buerki, past president of the American Hospital Association, Homer Wickenden, director, United Hospital Fund of New York, and Frank Van Dyk, executive director, Associated Hospital Service of New York.

"The outstanding piece of work of the council last year," Mr. Schweppe stated, "was launching the group hospitalization plan." In outlining work for the future, he said that "the immensely complicated problem of financial support of voluntary hospitals, the special problem of group purchasing and the political and legal question of favorable and just legislation for hospitals are all of interest to the directors of the council."

Other problems on which Mr. Schweppe intimated the council would soon start work are central hospital credit and collection service, standardized hospital terminology and standardized forms and accounting. He stated that the problem of financial support was to receive first consideration.

Dr. Arnold F. Emch, recently appointed executive director of the Chicago Hospital Council, was presented at the dinner. Doctor Emch comes to Chicago from Harvard University where he has been engaged in a study of research methods, foundations of science and methodology generally. He received his Ph.D. from Harvard and has also studied at the University of Illinois and in Basle, Switzerland. During the war he was with mobile hospital No. 100 on the Marne and later spent some time in Africa in sociological research. He has had many years' experience in organization, publicity and development of social institutions and in fund raising.

Doctor Emch succeeds Perry Addleman who resigned some months ago as executive director of the Chicago Hospital Council to accept the position of executive director of the Plan for Hospital Care in Chicago.

Elsewhere in this issue will be found the addresses Doctor Buerki and Mr. Wickenden delivered at the dinner.

Report Group Plans Have 700,000 Employed Members

More than 700,000 employed persons were members of group hospital service plans on January 1, 1937, according to data reported to the committee on hospital service of the American Hospital Association. The great majority of these are members of the free choice, nonprofit plans formed during the past four years. The eighteen largest plans account for 374,000 employees and 212,000 dependents. Seventeen more plans in operation have been formed recently or are in small communities.

Single hospital plans are twenty in number and enroll a total of 60,000 persons. The largest of these is the six-year-old Baylor University Hospital plan at Dallas, Tex., with an enrollment of about 20,000. Another 60,000 persons are members of privately operated plans, mostly in Dallas, Houston and San Antonio, Tex.

The largest plan is New York City's, with 148,000 employed subscribers and 68,000 dependents. Second is Cleveland, with 38,620 employed subscribers and 4,965 dependents; third is Minnesota, with 33,000 employed subscribers and 35,000 dependents receiving 25 per cent coverage. The Rochester, N. Y., plan reported 30,485 subscribers and 24,826 dependents. None of these figures include those hospital service plans which are limited in membership to the personnel of one business enterprise, or the membership of those plans which include medical and hospital care.

Quarantined Against Contagion

As a precautionary measure, the Veterans Administration Facility, Hines, Ill., placed itself under quarantine. None of the 1,750 patients at the hospital were ill of influenza and it was decided to keep them that way if possible. During the quarantine, visitors will be admitted only in case of an emergency.

Twin City Hospitals Fall in Line for Hospital Insurance

With the addition last month of St. Joseph's Hospital in St. Paul and St. Mary's Hospital in Minneapolis, the Minnesota Hospital Service Association brought in all of the nineteen voluntary hospitals of the Twin Cities.

At the annual meeting of the association on January 21, it was reported by E. A. Van Steenwyk, executive secretary, that the membership during 1936 increased from 12,000 to 33,000. The number of dependents covered also increased the same amount.

Several changes in officers were made at the annual meeting. Mother Harriet and Sister Leonella from St. Mary's Hospital and Mother Conchessa and Sister Una from St. Joseph's were added to the board. Rev. L. B. Benson, superintendent, Bethesda Hospital, St. Paul, was elected president to succeed Joseph G. Norby, superintendent, Fairview Hospital, Minneapolis.

During the year the association collected nearly $200,000 from members and dependents and paid over $91,000 to hospitals for their care. In the near future the association is planning to increase the protection offered to dependents, which now averages about 25 per cent of their hospital costs.

Emergency Lighting Lacks in N. Y. C.

A check-up on the emergency lighting plants of New York City's voluntary hospitals showed that fifteen of the sixty-one municipally subsidized institutions lacked the means to cope with such an emergency as faced Newark hospitals when the generating plant which furnished them with lighting suddenly creased to function. Dr. S. S. Goldwater, commissioner of hospitals, said that identical risks had been run by a number of municipal hospitals until last year, when an appropriation to provide portable emergency equipment for operating rooms throughout the department of hospitals was passed. An effort is being made to persuade every private hospital which receives city patients to provide an emergency lighting reserve sufficient to keep emergency operating rooms lighted at all times.

Contributions to Fund Mount...

Contributions are rolling in to the headquarters of the United Hospital Fund for the aid of its eighty-eight voluntary hospital members. A gift of $4,000 was received from Hubert H. Rogers, and employees of the Western Union Telegraph Company and the American District Telegraph Company of New Jersey contributed $1,767.47 to the fund. Further contributions announced amounted to $11,534, a total of $17,301.47.

M. BURNEICE LARSON
DIRECTOR.

. . . *the finest personnel in the land* . . .

Always there seems to be so *much* to do that never gets done. There always seems so much that *could* be done and *should* be done and *would* be done . . . . if you could only do it yourself.

Do not try it. Change your ways if you are courageously attempting it today.

The history of industrial America is *thick* with the stories of men who built vast and profitable organizations through the use of men as fine, as smart, as eager as they.

The story of America's hospitals, when it is written, will be parallel.

Hundreds, yes, *thousands,* are famed today for their service to their communities because *a man* shared the responsibilities, shared the executive tasks with many, shared the fame and the excitement and the income with those whom he delegated to carry heavy loads.

The greatest things in the world are made when the maker works with great enthusiasm. Every task in every hospital is done better when even *one* person in that hospital works with fiery purpose, with a song in his heart.

Go get that kind of personnel. Fill *your* niches with vital, eager, competent persons. Never again, just fill a position! Instead, fill each vacancy, as it arises, with the finest you can find. Then *ask* for the best there is in them. *Ask* it! *Expect* it! Give them *leave* and *reason* and *time* . . . . . and they'll *give* it.

Then things *will* get done as things should be done. *Each* will thrill to his part, give excitedly, willingly, *usefully* of his mind and energies . . . . . and success will come to those people, to that hospital, and *stay* for as long as you'd like.

We *know!* For over many years we've learned to fit hospital men and women into jobs they'd love . . . . and we've noted the great results . . . . until today we know that the bottom problem of any hospital is to get and keep "the finest personnel in the land."

55 E. Washington St. ★ *The* MEDICAL BUREAU ★ CHICAGO, ILLINOIS

NEW BUILDING PROJECTS

BERKELEY, CALIF. — Work on the $40,000 medical center of Berkeley General Hospital will be started on March 15.

ORANGE, CALIF.—Plans for an $18,000 dormitory for Orange County General Hospital have been completed by Everett Parks, Anaheim architect.

MIAMI BEACH, FLA.—Extensively soundproofed is the recently completed sixty-bed Alton Road Hospital. A three-story building with a white exterior, the hospital has two complete operating units with doctors' rest rooms, nurses' quarters, sterilizing rooms and adjoining equipment rooms. The x-ray department and clinical laboratory are to be under the direction of a full-time radiologist and pathologist. The hospital is open to members of the Dade County Medical Association.

ST. PETERSBURG, FLA.—This month saw work started on the $270,000 four-story unit for St. Anthony's Hospital.

DUNNING, ILL.—One year after it was begun, the $750,000 improvement program at Chicago State Hospital will be completed. A chapel and a new main building, with accommodations for 900 patients, have been erected, and a 2½-acre sunken garden, a spacious flower exhibit, softball and tennis courts and a playground have been constructed. The rock garden has an artificial brook running into a pond, and is decorated with rustic bridges, flagstone walks and shady coves. The flower exhibit includes 1,200 shrubs and 8,000 plants.

WOODSTOCK, ILL.—Plans and specifications have been approved for the construction of a new $50,000 building for the Woodstock Public Hospital. The building will be two stories high, with a partial third story to accommodate the operating and sterilizing rooms. The capacity of the new building will be forty-two beds, twenty more than the present building. Construction is being financed through a bequest of $50,000 from the late Mrs. George Bentley.

INDIANAPOLIS, IND.—Plans for the five-story addition to Indianapolis City Hospital have been approved. The wing, which will cost an estimated $344,500, will provide quarters for Negro interns and nurses, a dining hall and new service rooms.

LEXINGTON, KY. — Contracts have been let for the construction of three additional buildings at the Veterans' Administration Facility which will double the capacity of that institution. They call for a building to house acute cases, one for patients who must undergo continuous treatment, and a laundry to be erected at a total cost of $576,080. The present capacity of the Facility is 259 beds, although the total number of patients is usually from 270 to 275. The new buildings will add 306 beds to the hospital, raising its total to 565.

BRIGHTON, MASS. — The United States Marine Hospital at Chelsea is soon to be replaced by a new hospital to be erected here on a site overlooking the Charles River Basin and Boston Harbor. Plans will probably be drawn for a 350-bed building, with provisions for future enlargements.

GLENS FALLS, N. Y.—Work is starting immediately on a modernization program for Glens Falls Hospital. The old building is being completely remodeled and a new wing added. When finished the total capacity will be approximately 125 beds. M. L. Crandall of Glens Falls is the architect and Charles F. Neergaard of New York City the consultant.

LOCKPORT, N. Y.—In an effort to eliminate overcrowding in the Lockport City Hospital, a $200,000 addition is about to be constructed. Some repairs and remodeling are being planned for the present building.

WHITE PLAINS, N. Y.—Plans have been drawn and a campaign started to raise $1,200,000 for a new building for the White Plains Hospital. It is proposed to erect a modern central unit and west wing to replace the present main wing and to remodel and expand the present east wing. The east wing was built a few years ago and is of modern construction. These changes would increase the bed capacity of the institution from 120 to about 200. An interesting feature of the plans which have been drawn up by Schultze & Weaver, New York architects, with Charles Neergaard as consultant, is the arrangement of rooms for private patients along the corridors in an oblique manner, so that a corner of each room comes out to the southern building line. In the triangles created by the space between the rooms will be porches, one adjoining each room. Construction will permit beds to be rolled on to the porches. Structural glass will be used extensively throughout the six-story building. It is hoped to start construction in the near future.

WILMINGTON, N. C.—An addition to James Walker Memorial Hospital, which, when completed and equipped will have cost approximately $120,000 is now under construction. It will add fourteen private beds, twenty-four ward beds and an additional floor to the nurses' section of the hospital which will permit the expansion of the nurses' training school.

Up to Melbourne Standards

Extensive renovations and improvements are planned for Prince Henry's Hospital, Melbourne, Australia, with a view to making it as modern as the other hospitals in the city, according to information received from the specialties division, Bureau of Foreign and Domestic Commerce. The improvements designed for it are estimated at $1,000,000, and will take about two years to complete. The main block of the hospital will be twelve stories high, with a glass brick façade and long stretches of sun balconies on either side. From the center block two wings will be built, one to be used for outpatients and casualties.

Ask Funds for New Cottage

With a proud record of nearly 300 children aided to health, the Junior League of Harrisburg, which founded and maintains the Cottage for Convalescent Children, Harrisburg, Pa., opened a drive for $35,000 to finance the construction of a larger cottage. The original cottage, with a capacity of eight, was established in 1931 to provide expert medical, surgical and nursing care for children before and after hospitalization. Physicians and surgeons donate their time to the care of these small patients, and the Junior League membership finances all operating costs, which have totaled approximately $18,000. This is the first public request for funds.

Plans for Bermuda Hospital

A modernization and expansion program is under way by the King Edward VII Memorial Hospital in Bermuda. The hospital was originally operated by the government under the department of public works and was recently converted into a voluntary organization under the direction of a board of trustees appointed by the governor-general. Parliament has agreed to appropriate a definite sum each year to meet the cost of the needed new buildings and the operating deficit. Charles F. Neergaard of New York City is serving as consultant.

Hospitals for Rent

Two hospitals have put in bids for renting their facilities to Pittsburgh as temporary municipal institutions. The Allegheny General Hospital, which has moved into its new quarters, has offered to lease its old building to the city, and the Presbyterian Hospital, which will move to its new building next summer has offered to speed up its moving day if the city wishes to rent its old building. The city wishes to rent temporary quarters in order to move its hospital out of its present condemned building.

1925-1937

DO UNTO OTHERS AS YOU WOULD
HAVE OTHERS DO UNTO YOU

BAXTER'S INTRAVENOUS SOLUTIONS IN VACOLITERS ARE PRODUCED BY BAXTER LABORATORIES IN GLENVIEW, ILL. • GLENDALE, CAL. • COLLEGE POINT, N. Y. • DISTRIBUTED EAST OF THE ROCKIES BY AMERICAN HOSPITAL SUPPLY CORPORATION • CHICAGO • NEW YORK

NAMES IN THE NEWS . . .

HELEN HAYES and JAMES A. FARLEY initiated the final drive for a $400,000 building fund for Good Samaritan Hospital, Suffern, N. Y., when they filled the first coin card at the theater where Miss Hayes is playing in "Victoria Regina," before the opening of a matinée performance. Both Miss Hayes and Mr. Farley have homes in Rockland County, which is conducting the drive.

GEORGE WILSON, superintendent of Toledo Hospital, Toledo, Ohio, died suddenly at the hospital on January 9. Mr. Wilson, who had been chief of Hamot Hospital, Erie, Pa., from 1919 until 1930, when he took charge of the 250-bed Toledo Hospital, was fifty-five years old. J. L. RENFER is acting superintendent.

DR. E. E. MCMAHON, Douglas County physician and teacher of internal medicine at Creighton University, has been appointed superintendent and medical director of the Douglas County Hospital, Omaha, Neb., where he succeeds GEORGE D. GESMAN, superintendent, and DR. JAMES W. MARTIN, medical director.

DR. HENRY DWIGHT CHAPIN was honored by the Faculty Association of the New York Post-Graduate Medical School and Hospital, on the occasion of the fiftieth anniversary of his appointment as professor of pediatrics to the Post-Graduate Medical School and his eightieth birthday. Doctor Chapin, who is known as the "Dean of Social Service," through his conception and organization, in 1890, of the first hospital social service in the country, has also obtained nationwide recognition for his organization of the Speedwell Society and for his famous Chapin Adoption Nursery.

MISS R. L. WALKER is the new superintendent of Luling Hospital, Luling, Tex.

EDITH M. ODDY, who was appointed acting superintendent following the resignation of INEZ SMITH, has been named superintendent of Milford Hospital, Milford, Conn.

JEANETTE L. JONES, superintendent of South Side Hospital, Pittsburgh, died of pneumonia in the hospital she had served for twenty-nine years. She has been succeeded by GERTRUDE L. HEATLEY, her assistant, who for the past twenty-three years has been principal of the school of nursing.

THERESA E. SHIELDS, superintendent of the Miner's Hospital of Northern Cambria, Spangler, Pa., resigned from that position a short while ago.

DR. IRVING S. CUTTER, dean of the medical school of Northwestern University, superintendent of Passavant Memorial Hospital, Chicago, and health editor of the *Chicago Tribune*, has assumed another responsibility—that of medical director of the Chicago and North Western Railway.

DR. D. M. MORRILL, director of Blodgett Memorial Hospital, Grand Rapids, Mich., has been appointed superintendent of Detroit Receiving Hospital, Detroit, Mich., succeeding G. R. HARRIS.

WILLARD W. SEYMOUR, Syracuse, N. Y., a specialist in group life insurance and for years a leader in every civic and philanthropic enterprise undertaken by that city, has been appointed managing director of the Syracuse Hospital Service Corporation to succeed ROBERT PARNALL. Mr. Parnall resigned to accept a similar position at New Haven, Conn.

EDNA L. CHAMBERS, superintendent of Christ Hospital, Jersey City, N. J., from 1906 to 1910, a member of the Army Nursing Corps during the World War, and for the past six years on the staff of St. Barnabas House, a New York City mission, died recently.

DR. CHARLES C. HEDGES, superintendent of Roosevelt Hospital, New York City, has resigned his post with that institution.

MRS. F. P. GEARY, former superintendent of Ohio Valley Hospital, Steubenville, Ohio, has been appointed superintendent of Centre County Hospital, Bellefonte, Pa., where she will fill the vacancy caused by the resignation of MRS. AMY MACLAREN. MARGUERITE KRAPE, who has been acting superintendent of the institution, will again take over her former duties as day supervisor.

ESTHER M. ANDERSON has been appointed superintendent of La Rabida Jackson Park Sanitarium, Chicago, to succeed MAUDE JOHNSON.

DR. JOSEPH E. TILLOTSON was made superintendent of Colusa Memorial Hospital, Colusa, Calif., recently.

DR. J. F. BATEMAN, assistant superintendent and clinical director of Longview State Hospital, Cincinnati, Ohio, has been appointed superintendent of Columbus State Hospital, Columbus, Ohio, to fill the vacancy caused by the death of DR. W. H. PRITCHARD.

ERMA MUNSON is the new superintendent of Dinuba Hospital, Dinuba, Calif.

PETER WINTER is the new superintendent of of Shasta County Hospital, Redding, Calif.

LAURA E. COLEMAN, well known in the hospital field through her association with various institutions, died at Milton Hospital and Convalescent Home, Milton, Mass., of which she had been administrator since 1923. Miss Coleman helped to organize the Faulkner Hospital at Jamaica Plain and was its first superintendent from 1902 to 1905. Later she became superintendent of what is now the Millard Fillmore Hospital in Buffalo, N. Y., and at the expiration of her service overseas became affiliated with the Jordan Hospital at Plymouth, Mass.

DR. R. L. LOY, JR., superintendent of Oklahoma City General Hospital, Oklahoma City, was elected president of the Oklahoma State Hospital Association, and C. B. HANNA, superintendent of Chickasha Hospital, Chickasha, was reelected secretary-treasurer at the annual meeting of the association at Tulsa.

DR. GEORGE WILLARD GREEN, one of the founders of Ravenswood Hospital, Chicago, and a charter member and founder of the American College of Surgeons, died at the age of seventy-five.

CAPT. NEIL M. STEWART, a retired U. S. army officer, has been appointed to the newly created position of night superintendent of the Paterson General Hospital, Paterson, N. J.

BESSIE UPHAM, superintendent of Tioga County General Hospital, Waverly, N. Y., since October 1, 1936, has announced her resignation.

DR. HAROLD F. NORTON, senior physician at the Boston State Hospital, Dorchester Center, Mass., has been appointed superintendent of that institution. Doctor Norton succeeds DR. JAMES V. MAY, who recently retired from the superintendency.

MOTHER XAVIER, founder of St. Mary's Hospital, Waterbury, Conn., has been named superintendent of St. Francis' Hospital, Hartford, Conn., succeeding the late MOTHER A. VALENCIA.

IRENE H. SUTLIFFE, director emeritus of the New York Hospital school of nursing, New York City, died at the age of eighty-six, following a protracted illness. Miss Sutliffe was a director of the school from 1886 until 1902 when ill health forced her retirement. She was a leader in the development of nursing education in this country.

OWEN R. CAMPBELL, business manager of Community Hospital, Elk City, Okla., has been appointed superintendent of El Paso Masonic Hospital, El Paso, Tex., where he succeeds C. A. WAGNER who has gone to Tucumcari, N. M., to establish a new hospital.

ROY T. CHAMBERLIN, former FERA personnel director, has been named assistant superintendent of the Lucas County Hospitals, Toledo, Ohio.

Hard Times!! LET THE FOLLOWING ANSWER

$275,000 Raised for St. Mary's Hospital, Huntington, W. Va.

References

Most Rev. John J. Swint,
Bishop of Wheeling,
Bishop's Residence,
Wheeling, W. Va.

Arthur F. Shoffstall, Esq.
Campaign Chairman,
Huntington, W. Va.

Sister M. Carola, Supt.,
St. Mary's Hospital,
Huntington, W. Va.

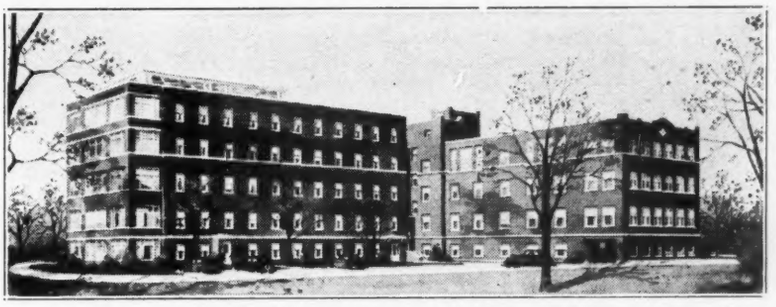
Campaign Direction

Ward, Wells & Dreshman,
New York City

Dr. Ray M. Bobbitt wires:

"Huntington, W. Va., January 20, 1937."

"St. Mary's Hospital campaign ended tonight with complete victory. Full objective of $275.000. raised. Your representatives given highest praise by the community. The campaign excelled anything of its kind in the history of Huntington. With almost insurmountable difficulties and epidemics affecting a large number of both workers and doners, in addition to flood conditions during the intensive appeal, the campaign was brought to a successful conclusion."



New Wing for St. Mary's Hospital financed in this campaign.

Our long experience in the dignified and successful raising of funds for Hospitals and Allied Institutions enables us to render a service that is distinctive and wholly satisfying.

Ward, Wells & Dreshman

Fifty-first Floor - R. C. A. Building

ROCKEFELLER CENTER NEW YORK CITY

Imagine the benefits of having fresh, 100% orange, lemon or grapefruit juice always ready to serve. Trujuis brings you the assurance of the highest possible quality. Citrus fruits, like vintage grapes, differ widely according to variety, soil, atmosphere, sunshine and culture. Here in Southern California, we select nothing but fruit that is outstanding for the flavor and aroma of its juice—tree-ripened Valencia oranges; lemons from the finest California orchards; grapefruit from selected California and Arizona desert groves. Picked at the peak of the season, these juices are quick-frozen by a patented process and vacuum packed in enameled cans. Each can contains nothing but 100% choice juice—nothing added—nothing removed.

Citrus seasons are short. Quick freezing and vacuum packing conserve the juices at their best and enable you to have uniform quality and freshness throughout the entire year.

Experts cannot tell the difference between these juices and juices freshly reamed from fruit. Good managers prefer them for their instant availability and economy in storage space, time and effort. For further information write today to:

Trujuis — California Consumers Corp. — Frozen Fresh Fruit Juices — Quick Freezing Alone Maintains Full Juice Freshness

CALIFORNIA CONSUMERS CORP.

Executive Offices:
230 W. Jefferson Blvd.
Los Angeles, Calif.

EDNA S. NEWMAN, director of the school of nursing at Cook County Hospital, Chicago, will leave that institution on February 28 to become director of nursing at St. Luke's Hospital, Cleveland.

C. RUFUS ROREM, director of the committee on hospital service of the American Hospital Association, has been appointed chairman of a special committee on accounting and statistics of the National Conference on Social Work.

I. ELIAS BEHRMAN, superintendent of construction and maintenance at L. Bamberger & Co., took office as superintendent of Newark Beth Israel Hospital, Newark, N. J., on January 1. PAULA H. MARX, who has been acting superintendent of the hospital since the resignation of DR. PAUL KELLER in January, 1935, will remain at the hospital as Mr. Behrman's assistant.

DR. JOHN E. KELLEY, superintendent of the Veterans Administration Facility, Togus, Maine, has been named superintendent of the Facility at Excelsior Springs, Mo., where he succeeds Dr. Robert C. Cook. Doctor Cook has been appointed superintendent of the Facility at Pittsburgh.

CHARLES A. ROVETTA has been granted a fellowship by the council of the American Hospital Association to serve as technical assistant to the advisory committee on hospital accounting. Mr. Rovetta is an instructor in accounting at the University of Chicago. It is expected that he will assist in the preparation of definitions of hospital terms and also make one or two special studies in hospital accounting for the committee.

DR. JOHN M. KIRBY is the newly appointed superintendent of Monterey County Hospital, Salinas, Calif. Influenza prevented Doctor Kirby's immediate assumption of his duties, and during his illness DR. F. HILTON SMITH served as acting superintendent.

DR. B. M. BERGER, former city health officer at Phoenix, has been appointed superintendent of the State Hospital for the Insane, Phoenix, Ariz., where he succeeds DR. JAMES R. MOORE.

DR. J. B. COPELAND, superintendent of Robert B. Green Memorial Hospital, San Antonio, Tex., has announced his resignation and his intention to practice medicine privately.

Nurse Loses Life When Home Becomes Fire Trap

Trapped, a graduate nurse lost her life, another was seriously injured, four other persons were hurt less seriously and several were spectacularly rescued when fire destroyed part of the nurses' home at Israel Zion Hospital, Brooklyn, N. Y. Most of the nurses had left the building to report for duty when the fire broke out at 7:20 a. m.

The home, which is a converted residence, lacked fire escapes and had iron bars over the first floor windows. A preliminary investigation by authorities disclosed that no certificate of occupancy had ever been issued for the use of the building as anything but a single family residence.

At the present time the hospital is constructing an eight-story building at a cost of $700,000, to expand its bed facilities by 225 beds. Boris Fingerhood is superintendent of the institution.

$3,000,000 to Medical School

A scheduled doubling of the number of free beds at Billings Hospital, Chicago, will probably follow the payment of a grant of $3,000,000 awarded to the University of Chicago for the development of its medical school by the General Education Board. The grant provides the university with about $360,000 a year, for five years, to be devoted to medicine. Of this, $250,000 continues present grants and $110,000 probably will be used to support free beds in the university hospitals. This sum would support forty-six free beds and contribute widely to the educational and scientific effectiveness of the medical school's faculty.

Commonwealth Fund Report Shows Occupancy Increase

An average occupancy increase of 18 per cent over 1935 is reported by the Commonwealth Fund for its first six rural hospitals. Three of these, and its seventh, the year-old Kingsport institution, with average occupancies ranging from approximately thirty-two to more than thirty-six, are, believes the Fund, handling as many patients as can conveniently be cared for, month in and month out, by a fifty-bed hospital which must earmark certain wards and rooms for definite uses.

In its eighteenth annual report the Fund points out that in its hospitals income has increased sharply, operating deficits have decreased and voluntary contributions have somewhat increased. Net indebtedness shows a comfortable decline.

At Tupelo, Miss., construction has been begun on the Fund's eighth hospital, and spring will find the ninth under way at Ada, Okla. It is anticipated that further awards will be made in the near future.

Lord Nuffield Enlarges Gift

An additional gift of £750,000 has been given to the University of Oxford by Lord Nuffield, automobile manufacturer, making the total amount of his gift for the development of the medical school £2,000,000.

Luncheon for Lay Boards

The annual luncheon for lay boards of hospitals and public health nursing organizations given by the Central Council for Nursing Education, will this year be held on Monday, February 15, at the Palmer House, Chicago. Dr. Joseph C. Doane, editor, The MODERN HOSPITAL, and superintendent, Jewish Hospital, Philadelphia, will speak on "How Nursing May Promote Interprofessional Relationships."

Public Health Groups to Meet

An overnight ride will enable more than half of the 5,000 members of the American Public Health Association to attend its sixty-sixth annual meeting to be held in New York City, October 5 to 8. The National Organization for Public Health Nursing will meet with the association and its six related societies for the first time.

Correlating Medicine and Welfare

In an attempt to correlate more thoroughly the work of physicians and social workers in each of the major categories of illness, the social service department of Grasslands Hospital, Valhalla, N. Y., has instituted a series of talks and round table discussions on the "Social Significance of Disease." Held in the Little Theater, County Center, White Plains, every Monday each subject is discussed by a physician and a social worker.

Coming Meetings

New England Hospital Association.
Next meeting, Boston, Feb. 25-27.

Tri-State Hospital Association (Georgia, Florida, Alabama).
Next meeting, Atlanta, April 8-10.

Western Hospital Association.
Next meeting, Los Angeles, April 12-16.

Ohio Hospital Association.
Next meeting, Columbus, April 13-15.

Tri-State Hospital Association (Indiana, Illinois, Wisconsin).
Next meeting, Chicago, May 5-7.

Minnesota Hospital Association.
Next meeting, Rochester, May 13-15.

National Housekeeper's Association.
Next meeting, Cleveland, May 20-22.

Hospital Association of Pennsylvania.
Next meeting, Buck Hill Falls, June 2-4.

Mid-West Hospital Association.
Next meeting, Colorado Springs, Colo., June 10-11.

International Hospital Association.
Next meeting, Paris, July 6-10.

American Hospital Association.
Next meeting, Atlantic City, Sept. 13-18.

American Public Health Association and National Organization for Public Health Nursing.
Next meeting, New York City, Oct. 5-8.

Freedom from film means Freedom from Bacteria.

Is your tableware fit for a King—or would it throw a King into a fit? Your dishes—silver and glassware will be ready for the scrutiny of even the most critical if you use Calgonite in your dishwashing machine. Because Calgonite produces a bright gleam and sparkle . . . real film free cleanliness. Let us prove it with a Calgonite demonstration in your kitchen.

CALGON, INC., 300 ROSS STREET · PITTSBURGH, PA.

Don't apologize-calgonize!

calgonite

LITERATURE *in* ABSTRACT • • •

Conducted by E. M. Bluestone, M.D. and Joe R. Clemmons, M.D.

Saving With Aluminum

Aluminum baking pans have recently appeared on the market.* Although three times as expensive as the tin-coated steel pans, they have many advantages that offset higher investment costs. These include:

1. Fuel Saving.—Steel is three times as heavy as aluminum. Therefore, by maintaining the weight of the pan, the wall thickness of aluminum can be increased two and a half times. This leads to a faster bake when the baking temperature is maintained or to baking at a lower baking temperature when the baking time is maintained. A fuel saving up to 15 per cent may be accomplished when tin-coated steel pans are replaced by aluminum pans.

2. Reduced Greasing Cost.—While a tin-coated steel pan has to be greased after each bake, or at least after each second bake, the aluminum pan is only occasionally greased—once a week in a bakery where pans are used twelve to fifteen times during each week.

3. Quicker Cooling.—Since aluminum pans cool in less time, more loaves of bread can be baked in one pan made out of aluminum than is possible in a steel pan.

4. Longer Life.—Due to the protective feature of the strapping and the fact that the pans themselves are not rigid, they are not so likely to be dented or bent.

5. Trading-in Value.—The metal value of an old pan is twelve to fifteen cents a pound. Damaged pans can be returned to the manufacturer who adds a certain percentage of virgin metal in order to manufacture new pans, and the only cost to the baker would be the amount of new metal used.

*Hoppe, F. A.: A Discussion of Aluminum Baking Pans, Bakers' Helper, Nov. 14, 1936, page 845. Abstracted by Anne Bass.

Measuring With a Flow Meter

Modern flow meters rank high in accuracy and dependability, however, no flow meter will provide accurate records if it is improperly applied.*

Principle of Flow Meter Operation: No flow meter actually measures the weight of fluid passing through it. Fundamentally all that any meter measures and records is the elevation of a column of mercury in a manometer.

The two sides of the manometer are connected separately into the steam pipe line before and after an orifice. Because of the resistance introduced by the orifice a pressure drop takes place as the steam flows through it and this pressure drop is measured by the mercury manometer.

Now, by means of a mathematical relationship and experimentally determined constants, it is possible to compute the weight of steam flowing through an orifice from the measured elevation of the mercury column. Commercial flow meters, instead of actually indicating and recording the elevation of the mercury column, are calibrated so that the weights of steam, corresponding to the different elevations of the mercury column, can be read directly.

In order to calibrate a meter in this way, the density and pressure of the steam which is to be measured must be known. If the steam were at any other pressure, either a new scale would be needed or it would be necessary to use a correction factor. Recording meters are calibrated for only one steam pressure.

Correcting for Pressure Changes: Mathematical analysis shows that for a given elevation of the mercury column, the actual weight of steam flowing through a meter orifice varies directly as the square root of its density. Hence, when the steam pressure is different from the pressure for which the meter was calibrated, the relation between the actual weight of steam flowing through the orifice and the weight recorded by the meter is given by

$$W = W_s \sqrt{\frac{d}{d_s}}$$

where

W = Actual weight of steam flowing through the orifice per hour.

W_s = Weight of steam recorded by the meter.

d = Density of the steam at its actual pressure.

d_s = Density of the steam under the standard pressure for which the meter was calibrated.

Where steam pressures vary it is desirable to install an automatic compensating device which will automatically correct the meter record to compensate for variations in pressure from those for which the meter was calibrated.

Correcting for Steam Quality and Superheat: The density of steam does not vary only with pressure. It also varies both with changes in the dryness (quality) of the steam and with changes in its superheat. Superheated steam has a lower density than saturated steam at the same pressure. If the meter is calibrated for saturated steam, while actually superheated steam flows through the orifice, it is apparent that the meter will record too great a weight of steam.

Pressure reducing valves are often used for the double purpose of providing low pressure steam and for holding a constant pressure at the meter. Saturated steam which is throttled from a high to a lower pressure by a reducing valve is always superheated during the process. Either the steam must be de-superheated before it reaches the meter or the meter must be calibrated for superheated steam.

It is always necessary to be careful when placing meters immediately after pressure reducing valves.

Another source of error is the dryness of steam; the dryer the steam the greater will be its density. Thus, a meter calibrated for dry (saturated) steam would read high if wet steam flowed through it. If an excessive amount of condensation took place in the steam line ahead of the orifice, the meter would record too great a weight of steam.

Plant Alterations Cause Meter Errors: While an installation originally made under the supervision of the meter manufacturer will usually be satisfactory, plant alterations made later are apt to cause errors. While these alterations may in themselves be minor, they are likely to have a marked effect upon the accuracy of the meter. Any change that alters the density of the steam from that for which the meter was originally calibrated will require the use of either a correction factor or a meter compensating device.

*Goodman, William: Correcting Flow Meter Readings, Heat., Pip. and Air Cond., 8: 592 (Nov.) 1936. Abstracted by Louise Large.

Electrotherapy for the Medical Profession

Electrotherapy has a definite physiological basis in the treatment of disease, and its efficient administration depends not only on a knowledge of health and disease processes, but also on an intimate knowledge of the physical forces evoked* It is unfortunate that electrotherapy is employed today in a purely empirical manner. Merely asserting that "such and such a treatment is good for such or such a disease" removes all trace of the art in medicine. It simply means that the maximum therapeutic effect is but seldom logically reached.

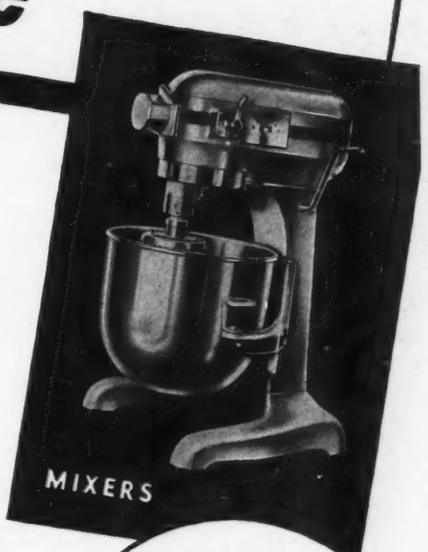
The number of trained electrical technicians in England began to increase rapidly after the world war. These men are really unqualified practitioners and have assumed as their field one which ought to be in the hands of the medical profession. Because of a regrettable decision of the

To the Kitchen Operator...

When you MODERNIZE, it pays to HOBARTize

ONE SOURCE

for your entire equipment of Mixers, Dishwashers and Glasswashers, Slicers, Food Cutters, Potato Peelers and Air Whips —the World's Leading Manufacturer. *Sold thru' leading Kitchen Outfitters.*

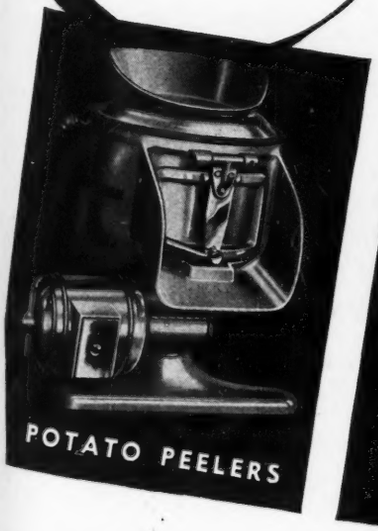


SELECTION

The most complete range of Models (sizes and capacities) enables you to match your precise needs with a Hobart Machine.

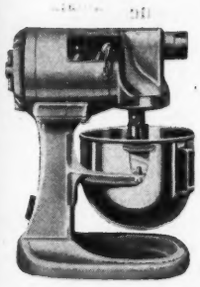
MORE FOR YOUR DOLLAR

Hobart's specialized engineering—Hobart manufacture "from the ground up" —give you machines that are mechanically superior and closely fitted to Kitchen tasks.



SERVICE

One guarantee — one service, cover all Hobart Machines. Service Stations in all principal cities throughout U. S. and Canada



Model "G" Kitchen Aid

KitchenAid

is a small adaptation of Hobart Mixers — for your home kitchen; performs on smaller scale every task of larger Hobart Machines; wide line of Practical Attachments.

MORE INFORMATION

HOBART MFG. CO., 902 PENNA. AVE., TROY, O.

Please send us detailed information on Kitchen Machines checked.

- ☐ MIXERS: Small—medium—large
- ☐ SLICERS
- ☐ AIR WHIPS
- ☐ FOOD CUTTERS
- ☐ DISHWASHERS: GLASSWASHERS
- ☐ POTATO PEELERS
- ☐ KITCHENAID for the Home

NAME .....

ADDRESS .....

CITY & STATE .....

British Medical Association, medical men are even recommended to send them their patients for treatment. This is doubly unfortunate—electrical treatment is being prescribed by practitioners who have no knowledge of the remedy they are prescribing and the treatment is administered by those who are entirely ignorant of the nature of the disease they are treating.

The future of electrotherapy will be held in abeyance until certain simple reforms are initiated. First, electrotherapy should be included in the course of study of every medical student. In this way its value as a therapeutic procedure will be brought home to the medical public directly. Second, it is becoming more apparent that since the initial cost of adequate equipment is almost prohibitive and the time required for adequate treatment is generally more than the average office visit can provide for, it is falling more and more to the lot of the modern well equipped hospital to assume care of these patients in its clinics and on its wards. The author believes that treatment provided in this way is not only one-tenth as expensive, but ten times as efficient as that administered on the outside. To further this purpose, the presence of a full-time medical man, who has made a specialty of this field, is imperative for supervising suitable treatment.

*Turrell, W. J.: Electrotherapy and Its Future, Brit. M. J., 2: 1022 (Nov. 21) 1936. Abstracted by I. D. Stein, M.D.

Air Conditioning for Hay Fever

In a report issued by Dr. E. L. MacQuiddy, assistant professor of medicine, University of Nebraska college of medicine, appears a discussion on hay fever relief by air conditioning.* Doctor MacQuiddy conducted an experiment with three different types of air conditioning equipment: a complete, year round conditioning unit; a smaller unit which cooled, dehumidified, washed, and circulated the air, and a cooling and circulating machine only.

Pollen, bacteria, and spore counts, temperature and relative humidity readings were carried out. Pollens found at the time were ragweeds and burweed marsh elder.

The conclusion Doctor MacQuiddy reached was: "Patients suffering from hay fever and pollen asthma obtained sufficient relief to indicate that air conditioning will become an important adjunct to other means of therapy. Air filtration obtained by the methods studied was satisfactory."

Even a cooling and circulating machine makes an appreciable inroad on the pollen content of the air, partially due to the closed room, partially to the manner in which the air is cooled. The variations are much more marked in a room served by the cooler than in those rooms completely conditioned.

The variations in the two rooms that are both conditioned is traceable to the differences in the machines. The reduction of pollen content is sufficiently low in either model to give the hay fever sufferer practically complete relief.

Of twelve cases closely observed, eight showed marked improvement within a matter of a few hours. One case was reported "slight improvement," and one, "little clinical improvement, but felt markedly better." Two showed no signs of any real improvement in their condition. Doctor MacQuiddy concluded, "the relief obtained was in a large measure due to the absence of pollen in the air."

Ten cases of asthma were also studied, and eight, "were improved during the time they were in the air conditioned rooms." Practically the entire group of asthma sufferers had "pollen asthma."

*Hay Fever Sufferers Relieved by Air Conditioning, Heat. & Ventil., 33: 52 (Oct.) 1936. Abstracted by Louise Large.

Air Through Doors

An important source of heat load in summer cooling installations is the infiltration of air through doors. Tests were conducted on doors of all types including hinged doors, hinged doors with vestibules and revolving doors.*

A study of the weather bureau records in New York shows an average wind velocity of ten miles an hour when the wet bulb temperature was 75° F. or over. During the four summer months it was nine miles an hour.

Wind direction has little bearing on infiltration or exfiltration through doors due to the pressure areas and eddy currents set up by surrounding buildings. Where a door faces a large open area, the direction of infiltration will be the same as the wind. One can expect to find infiltration or exfiltration regardless of wind direction when the wind has a normal velocity.

A door was left in open position to obtain the velocity of the air flowing through. The time which the door remained open while a person passed through was determined. The two figures combined approximate the amount of air flowing through the opening.

Two hundred and fifty hinged doors entering into areas having doors in one wall only showed a mean infiltration velocity of 165 feet a minute per door. In entrances directly exposed the infiltration velocity approximates 250 feet a minute. In protected doorways the infiltration velocity approximates 75 feet a minute. With a velocity of 165 feet a minute, a double door 5 feet wide would have an infiltration or exfiltration of 5,800 cubic feet a minute and a single door approximately 3,000 cubic feet a minute.

Entrances to areas having doors in more than one wall showed infiltration velocity varying from a minimum of 140 feet per minute to 350 feet per minute with a mean of 256 feet per minute. A double doorway remaining open represents infiltration of approximately 9,000 cubic feet per minute. The large additional refrigeration capacity needed when doors are to be left open can readily be calculated.

The average effective opening for single door entrances was approximately 2 seconds per person passing through. When the effective opening is 2 seconds the infiltration volume would be 110 cubic feet. A single doorway will have an average infiltration of 165 cubic feet per passage.

A vestibule gives only 25 per cent better protection than a single swing door. The flow of traffic is often such that both doors are open at the same time. An entrance having a vestibule, when opening into an area having doorways in more than one outside wall, has an infiltration volume of 128 cubic feet per person.

Infiltration through revolving doors is due to the air displaced as they revolve. Governing factors are (1) speed and number of rotations; (2) scavenging effect of air currents directed toward the compartments of the door; (3) differences in internal and external temperature which set up vertical circulation of air in each compartment. The normal operating speed is 12 to 14 revolutions per minute; number of revolutions, approximately .4 per person. A door 7 feet in diameter and 7 feet high indicates 46 cubic feet of displacement per revolution and 18½ cubic feet per person.

The infiltration per passage through spring doors is not proportional to the number of passages per hour but is practically constant to about 1,600 passages per hour. Above this figure it decreases rapidly. The reverse is true for revolving doors — the infiltration per passage decreases steadily with increased number of passages.

*Simpson, A. M., and Atkinson, K. B.: Infiltration Through Doors, Heat. and Ventil., 33: 50 (Oct.) 1936. Abstracted by J. R. Clemmons, M.D.

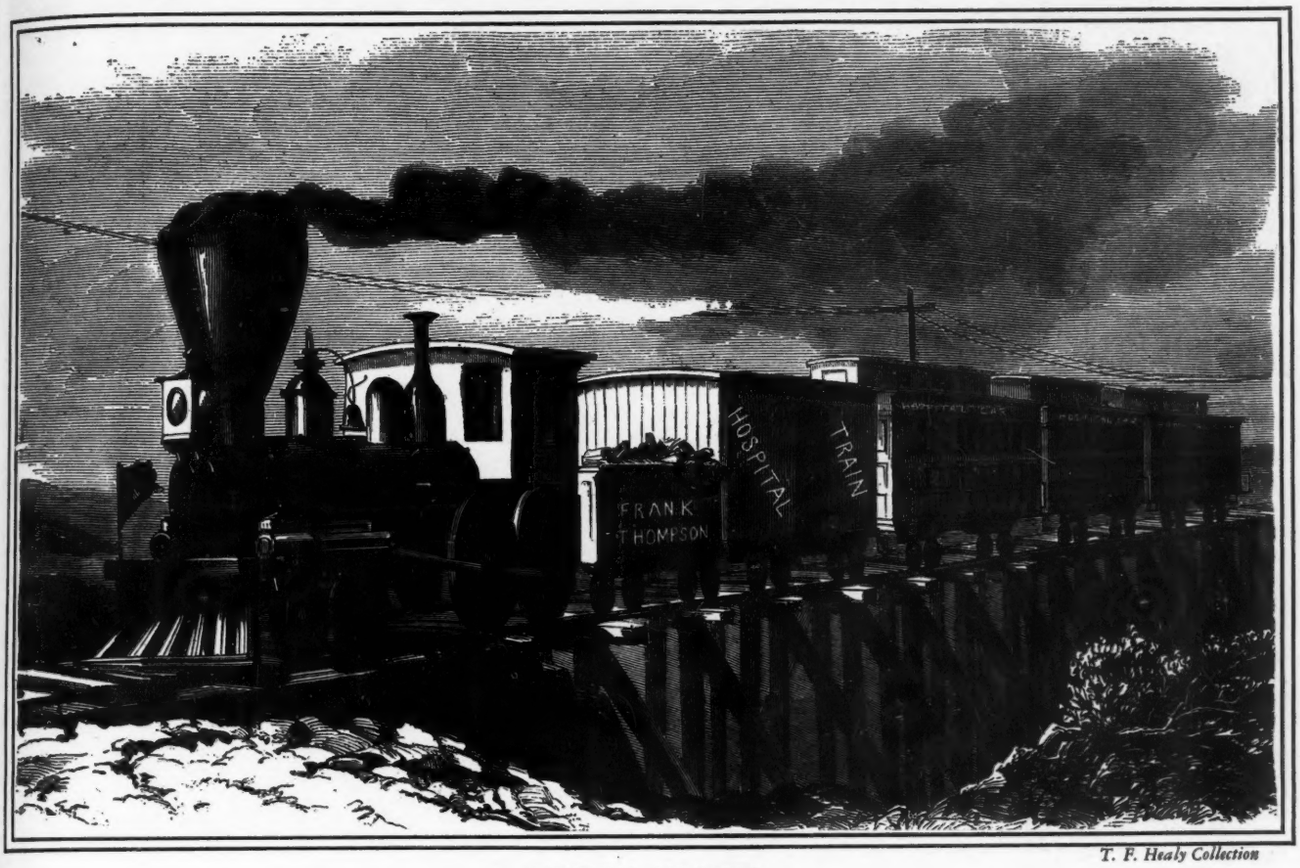
Combination Lighting

The improvements in incandescent lamps have tended toward whitening the light.* Even beyond that some users have demanded the daylight Mazda lamps at a sacrifice in lumens per dollar. Now combinations of incandescent and type H mercury lamps are gaining prominence.

By combining the light from the type H mercury lamps, which is roughly complementary to that of the tungsten filament lamp, with that from the tungsten filament lamps in

When Nashville Was The Goal

Hospitals Depended on Webb's Alcohol



T. F. Healy Collection

HOSPITAL ON RAILS

From Chattanooga to Nashville, a distance of over 150 miles, was a typical journey for a hospital train in Civil War days. Refinements of the period included portable beds or bunks suspended from India-rubber bands. Nevertheless, the trip was an ordeal for the wounded. Alcohol with its manifold medical uses did much to alleviate the pain and suffering.

RATTLING over wind-swept trestles, echoing through the surrounding hills came the hospital train. Nashville was its goal. Hospital bunks burdened to capacity with injured swayed with every lurch of the crude, wood-burning locomotive. From up forward came a steady stream of soot.

Now a head would be raised as some soldier stirred uneasily. To his side would hurry the attendant ready to cleanse a wound or bathe a feverish body with cooling alcohol.

The familiar Webb's alcohol—recognized as the country's standard — did priceless service to the sick and injured during the Civil War. Even before the war, as far back as 1835, Webb's alcohol could be found in leading hospitals.

When James A. Webb and Son became a part of the U. S. Industrial Alcohol Co. in 1915, the move was hailed as a happy combination of the finest traditions and the latest technical resources.

Today in 1937 Webb's and U. S. I.-U. S. P. brands of pure alcohol maintain their leadership. Hospitals and doctors give it their stamp of approval. You, too, can *depend* on U. S. I. to fill your alcohol requirements.

Charts illustrating a simple method for determining the amount of 190 proof alcohol in 54 gallon drums by stick measurements can be secured by writing to U.S.I.

ALCOHOL

U. S. I. - U. S. P. WEBB'S

ONE HUNDRED YEARS OF SERVICE TO HOSPITALS

U. S. INDUSTRIAL ALCOHOL CO. 60 EAST 42ND STREET, NEW YORK
BRANCHES IN ALL PRINCIPAL CITIES

equal lumen combinations, an illumination is provided which is satisfactory for offices, schools and other areas where approximate natural appearance of colors is desirable.

These combinations produce an illumination which simulates white light or daylight, making white colored objects appear whiter. It is not recommended where accurate color discrimination is required. The outstanding advantage of type H mercury lamps is the fact that they produce from 50 to 100 per cent more illumination than would be obtained from incandescent lamps of equal wattage. Of particular importance for air cooled office spaces is the fact that mercury lamps produce 50 to 100 per cent more light for the same space heating effect.

Complete lines of equipment suitable for office installation are available for combining the type H mercury lamps with incandescent lamps.

Auxiliary Equipment: In common with all electric discharge lamps, auxiliaries are essential for the 400 and the 250-watt mercury lamps. Enclosed auxiliaries are provided, either with angle brackets top and bottom to facilitate mounting on flat surfaces or on racks, or with pipe connections top and bottom by means of which the auxiliary can be suspended adjacent to the luminaire or incorporated as part of the luminaire suspension.

Auxiliaries which are not enclosed are recommended for use only in luminaire canopies where size is a consideration. They have angle brackets conveniently drilled to permit easy installation.

Power Factor: The enclosed type auxiliaries are recommended, as a rule, with power factor correction, for the supply lines are relieved of an unnecessary burden, better voltage conditions result at the lamp, and economies in operation and installation are achieved.

The uncorrected installation will draw from 50 to 80 per cent more current than the corrected one. When low power factor units are used in equal lumen combination installations, the overall power factor will be improved.

Wiring — Panelboard to Auxiliary: Wiring from the panelboard to the auxiliaries should be of sufficient size to keep the wire losses within reasonable limits, inasmuch as operating the lamp above or below rated voltage or current will affect the life and lumen output of the lamp. Where there is a possibility that the current through the lamp is too low, due to line drop, it is well to check with an ammeter and, if low current is found, to change to a lower line voltage tap on the auxiliary.

Wiring—Auxiliary to Lamp: The mercury lamps may be located at any distance from their auxiliaries provided the drop in the wires connecting the lamp and the ballast is under 2 volts.

While each lamp does require a separate auxiliary from which no other load can be drawn, the grounded side of the line, to which is connected the auxiliary and the lamp, can be used as a common conductor, in which event it should be of proportionately larger wire.

Combination lighting has a value psychologically which renders it worthy of consideration, though it is impossible to justify its use economically in place of regular incandescent lighting at the present time on a foot candle for foot candle basis. It can be justified economically when compared to the use of daylight Mazda lamps.

Combination lighting accentuates the cool colors and tints, while regular incandescent lighting alone accentuates the warmer tones, and it is a matter of record that when large areas are finished with cool blues, greens or grays, they appear to have a more restful, quieting effect and tend to make the room appear larger.

*Darling, W. G.: The Latest in Lighting, Skyscraper Management, October, 1936, page 6. Abstracted by Louise Large.

Testing Fabric Damage From Laundry Solution

A corrosive chemical acts upon cotton or linen fabric to change the cellulose to an oxy- or hydrocellulose of much lower tensile strength. The use of Fehling's solution to indicate oxy- or hydrocellulose is the generally accepted test.*

Place sample of material in solution and boil three minutes. Remove sample and wash thoroughly with water. Undamaged fibres are colored blue; damaged fibres, red. The intensity of color depends upon the extent of damage.

To determine the cause of damage to an article, samples from the damaged area should be tested for active chemical presence. Usually some previous washing operation has removed the cause. Washing does not remove all of the coat of oxy- or hydrocellulose. It is possible by the Fehling's solution test to determine whether the damage was due to chemical or mechanical cause.

In laundry washing all portions of a load contact the washing solution, therefore the process cannot cause local chemical damage. Holes or tears due to mechanical causes usually have sharp edges and definite outline recognizable before washing. Later it is necessary to resort to Fehling's solution test. Even then accurate determination of the cause of damage, chemical or mechanical, is difficult.

*Determining Fabric Damage, Starchroom Laun. J., 43: 82 (Oct. 15) 1936. Abstracted by J. R. Clemmons, M.D.

Bleaching for Stain Removal

Bleachable stains are caused by perfume, tea and coffee, perspiration, scorch and urine. Most yellow (unknown) stains belong in this class.*

Semi-bleachable stains are those that require bleaching after the body of the stain is removed by use of a detergent or solvent. Included in this class are fruit stains, grass and foliage, flavoring extracts, medicine, inks, mildew, tobacco, wine, smoke, tumeric and tea and coffee with sugar and cream. Perspiration and urine listed as bleachable may be included here.

A large number of staining substances best removed by combined detergent and bleaching action are: blood, berry, mud, clay, syrupy medicines, fruit, catsup, beer and cement. Stains of the semi-bleachable type and those requiring combined detergent and bleaching action are similar.

All bleaches suitable for spotting offer disadvantages. Peroxide forms of spotting bleach are popular because of their effectiveness and safety, although they are not quick-acting.

Commercial peroxide is slightly acid and neutralization by an alkali increases its bleaching property. Sodium perborate is preferable since perborate itself in proper strength is equivalent to peroxide as a spotting bleach. The most active peroxide spotting bleach is found in the addition of 1 teaspoonful of perborate dissolved in 1 pint of cold water and added to 1 pint of peroxide. Both peroxide and perborate solution should be made fresh daily.

To use peroxide perborate bleaches, sort out stained garments, apply bleach directly to stained areas. Hang garments for 10 to 20 minutes. Finally sponge treated areas with water and allow to dry at room temperature. Heat accelerates the activity of peroxide perborate bleaches and in cases where quicker action is desired it may be used.

Stains requiring combined detergent in bleaching action are usually treated with a spotting agent that is a combination of a detergent and perborate or peroxide bleach. It is prepared by adding one part peroxide to two or three parts of a suitable soap spotting solution, or by dissolving 1 teaspoonful sodium perborate in 1 pint of soap solution.

The usual procedure is to apply the spotting solution and work it thoroughly into the stain then allow from 10 to 15 minutes time before sponging out with cold or lukewarm water.

Suitably prepared combinations of soap and peroxide or perborate increase the detergent action of the soap and bleach. The solution is generally used cold. Warming slightly increases the effectiveness of the detergent and bleach.

*Bleaches and Bleaching in Stain Removal, Starchroom Laun. J., 43: 24 (Oct. 15) 1936. Abstracted by J. R. Clemmons, M.D.

UROTROPIN

Forty some years ago, the introduction of Urotropin (methenamine) as a urinary antiseptic made history. When new compounds began to bid for recognition, the glamor of newness threatened for a while to overshadow every other merit. But Urotropin, in comparison with numerous new urinary antiseptics, has stood the test of time. Its efficiency has been repeatedly reaffirmed. In Urotropin, the physician has a brand of methenamine of high chemical purity and reliability. The tablets are properly preserved in sanitape against contamination and deteriorating influences. When you prescribe Urotropin, you obtain a reliable brand of methenamine. Available in 5-grain tablets, 30 in a box; 7½-grain tablets, 20 in a box. Also larger packages for dispensing.

SCHERING & GLATZ, INC.
113 West 18th Street, New York City

MODERN HOSPITAL WINDOWS

Fenestra

Among the most modern general institutions of its kind is the St. Joseph's Hospital at Parkersburg, West Virginia, Architects Fox, Duthie & Foose. Its Colonial design is enhanced by the use of small paned, Fenestra Windows with Tilt-in ventilators at the sills and side-hung open-out swing leaves above. All window openings are screened. The many conveniences which these windows afford in the way of abundant ventilation, draft control, privacy, easy operation and lack of maintenance expense have made them an outstanding feature and a source of satisfaction to both patients and attendants. For details write, Detroit Steel Products Company, 2256 East Grand Boulevard, Detroit, Michigan.

BOOKS ON REVIEW

PSYCHOLOGY OF DEALING WITH PEOPLE. *By Wendell White, Ph.D. New York: The MacMillan Company.* 1936. *Pp.* 256. $2.50.

Many attempts have been made to apply the facts and principles of modern psychology to problems of everyday life. Few attempts have been made to discuss the psychology of dealing with people. Mr. White is fairly successful in dealing with the psychology of this most important aspect of human relations.

The book is divided into four parts. Part 1, "Dealing with People in Life Situations in General," is the largest section of the book, containing seven of eighteen chapters. The chapter headings are: presenting one's ideas indirectly; presenting one's ideas directly in an inoffensive manner; designating an act as creditable or discreditable; acknowledging the worth of others indirectly; removing objectionable ideas inoffensively; enabling others to gain distinction for ability; expressing doubt as to a personal quality of another. Each chapter is subdivided into many subheads, most of which present practical situations, and offer suggestions made for meeting them.

Part 2, preventing wrong-doing, contains only two relatively short chapters and is probably the most inadequate section of the book. The morals involved in dealing with others can hardly be dealt with in so limited a space.

Parts 3 and 4 deal with the problems of mental hygiene. Part 3, "Preventing Peculiar Behavior," is divided into six chapters. Here are discussed such problems as reminiscing, rationalization, repression and physical disabilities.

Part 4 discusses in three short chapters the problems of furthering mental health. Emphasis is placed upon the use of positive rather than negative appeals in motivating behavior; upon providing wholesome compensations through hobbies, proper imaginary achievements, thoughts of efforts and a feeling of ownership. The last chapter deals with the topic of controlling another person's comparison of himself with others.

The book closes with a set of self-testing exercises. The value of these exercises is questionable for no adequate instructions are given to the reader for interpreting the results of the tests.

The book can hardly be said to be scientific. This is not entirely the fault of the author for there are no scientific data on many of the topics treated.—L. W. WEBB.

MANUAL OF DIETS. *Medical Board, Montefiore Hospital, New York City. Second edition.* 1936. *Pp.* 31. $0.50.

This manual presents over thirty special diets and their modifications in addition to the routine house diets served at Montefiore Hospital. The convenient and concise arrangement has made it possible to present a large amount of valuable material in thirty-one small pages. The information is outlined under the following headings: indications, characteristics, foods allowed and foods to avoid. A number of diets which are commonly used in hospitals but often omitted from dietetic handbooks are included, such as low creatine-creatinine and intestinal protein diets.

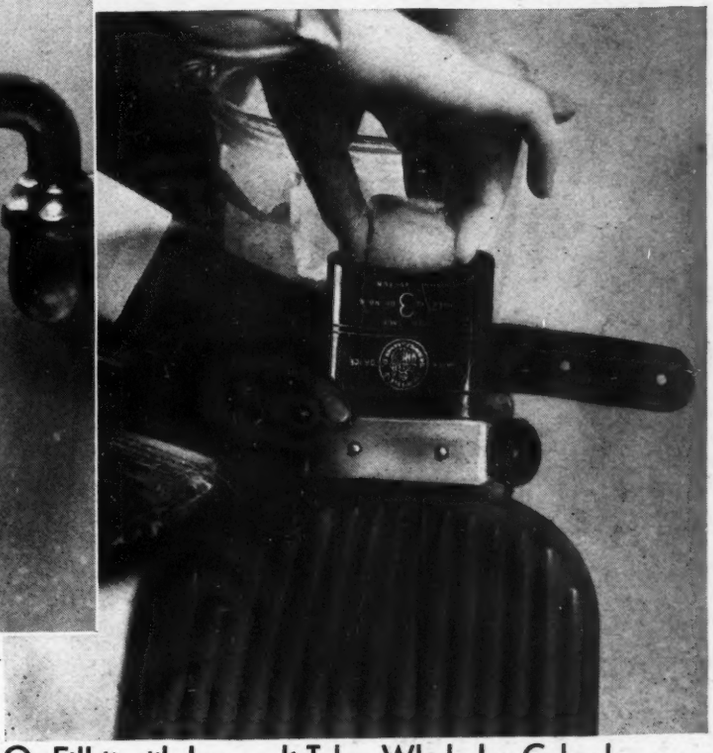
Tables of energy requirements of children, approximate values of common foods, classification of fruits and vegetables with substitutions, and approximate weights of servings are given. Under allergy are listed the basic elimination diets, the most common offending foods, foods that seldom cause allergic reactions and typical menus.

This manual will be a welcome addition to the library of every dietitian.—ELIZABETH H. TUFT.

Here's either Hot Water Bottle or Ice Cap as occasion demands . . .

Fill it with Hot Water . . . No Clouds of Steam!

Two Units in One



Or Fill it with Ice . . . It Takes Whole Ice Cubes!

Simple patented closure . . . Proof against leakage.

ECONOMY . . . efficiency . . . convenience! The Stopperless Hot Water Bottle and Ice Cap! It fills the place of two units, hot water bottle or ice cap. Always ready to serve either purpose. And no fumbling with old-style stoppers or caps! Just a simple patented self-closure . . . proof against leakage. Two styles: Plain or corrugated (heat-radiating). Sold by your supply dealer.

The

STOPPERLESS

Hot Water Bottle & Ice Cap

MADE BY SR *Seamless*

THE SEAMLESS RUBBER COMPANY
NEW HAVEN, CONN.

● We know a way to relieve some of the hard work of trying to satisfy a hospital appetite.

Nowhere else are palates so critical as in a hospital bed. With dispositions upset and systems on edge, both psychologically and pathologically, hospital patients are notoriously hard to please at meal times.

Continental Coffee has pleased many hospital dietitians because it has pleased so many hospital patients. Continental is blended and roasted especially for tastes hard to please. It has a smooth mellow flavor that makes a thoroughly comforting drink.

In addition, Continental has developed a service plan that assures the best coffee *in the cup*. You should know about this. We'll be glad to tell you without obligation if you'll write us today. Continental Coffee Company, 371-375 W. Ontario Street, Chicago.

CONTINENTAL COFFEE

America's Leading Institutional Coffee

NEW PRODUCTS • • •

A Fracture Room on Wheels

Letting the nurse's head save her heels, to say nothing of a lot of valuable time is the purpose of the new Daniels orthopedic carriage recently marketed by Jarvis and Jarvis, Palmer, Mass. Often during an orthopedic operation it is discovered that some vital piece of equipment is missing which means that a nurse dashes back for it while the patient bites his nails and the surgeon tears his hair, likewise the nurse's.

The new carriage is said to transport at one time all the fracture equipment needed on a case—even the more difficult operations—right to the bedside, making trips back to the fracture room unnecessary. Furthermore when the fracture is near a joint and a spike is necessary through the heel or tongs through the knee, the top of the carriage can be used as a dressing table by simply covering it with sterile goods.

The carriage is a handsome piece of equipment. It has three roomy shelves, eight compartments and two drawers, also a rack for adhesive tape. When the operation is over, the carriage is taken back to the fracture room and refilled, ready for the next case.

Don't Skin 'Em Alive

R-rrip! Yow! That's a two-word picture of a patient having the adhesive tape ruthlessly yanked off his epidermis without benefit of removing compound. It is unnecessary to skin the patient in an effort to remove adhesive tape these days, with such preparations as Ohio Carbon-Tetrachloride Compound, manufactured by the Ohio Chemical and Manufacturing Company of Cleveland, on the market. One simply lifts one corner of the adhesive tape, rubs a piece of cotton moistened with the solvent on the skin under the tape, and, we are told, the fluid works on ahead. This compound is said to be noninflammable and leaves the skin clean and unharmed. Properly used, a small amount should go a long way.

Visual Education in Oxygen Administration

When the nurse—or the intern or doctor—does something wrong in administering oxygen to a patient, she does him very wrong indeed. Because things can go wrong with this process, the Linde Air Products Company, 30 East Forty-second Street, New York City, has issued a two-reel film depicting the recommended practices for handling the various types of apparatus.

This subject is handled from the mechanical angle of the subject and does not attempt to present any clinical or medical information. The several types of oxygen administration now in popular use are described and scenes taken in leading hospitals throughout the country show the apparatus employed and through actual demonstration how it is set up and kept in operation. The types of administration treated are: nasal catheter (both nasopharyngeal and oro-pharyngeal), face mask and nasal inhaler, oxygen tent and oxygen room.

Emphasis has been placed on the factors which lead to safe, economical and effective administration of oxygen therapy, including such subjects as the analysis of oxygen concentrations, the storage and handling of oxygen cylinders, the correct use of regulators and the safety precautions to be observed.

Smoky

Gall-Bladder Films?

TRY

IODEIKON

(MALLINCKRODT)

As surely as smoke hides a battle-ship, "smoky" gall-bladder shadows due to a faulty medium, obstruct interpretation. Iodeikon is uniformly dependable, a medium which highlights even minute details of the gall-bladder in bold black and white.

Iodeikon (a pure sodium tetraiodophenolphthalein) saves time and labor as fewer retakes are required with its use. Patients appreciate this. The physician is grateful for a clearer visual which facilitates his diagnosis. Insist on the happy gall-bladder medium—Iodeikon.

Iso-Iodeikon is an isomer of Iodeikon which gives a gall-bladder X-ray and hepatic function test by means of a single injection.

Send for simple technic and interesting literature.

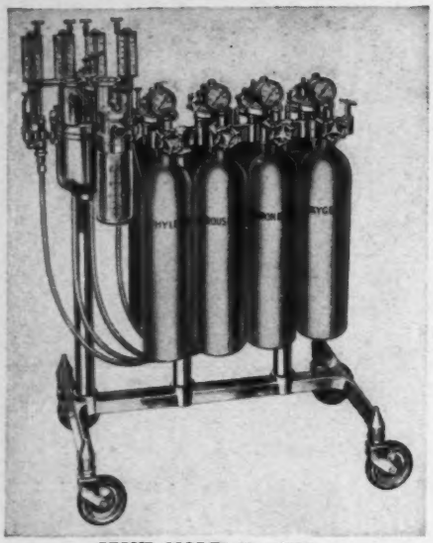
Mallinckrodt

CHEMICAL WORKS

PROTECTING THE POTENCY OF YOUR PRESCRIPTIONS SINCE 1867

HEIDBRINK

GAS APPARATUS



KINET —O— METER

•

STAND, CART OR CABINET MODELS FOR 3, 4 OR 5 GASES

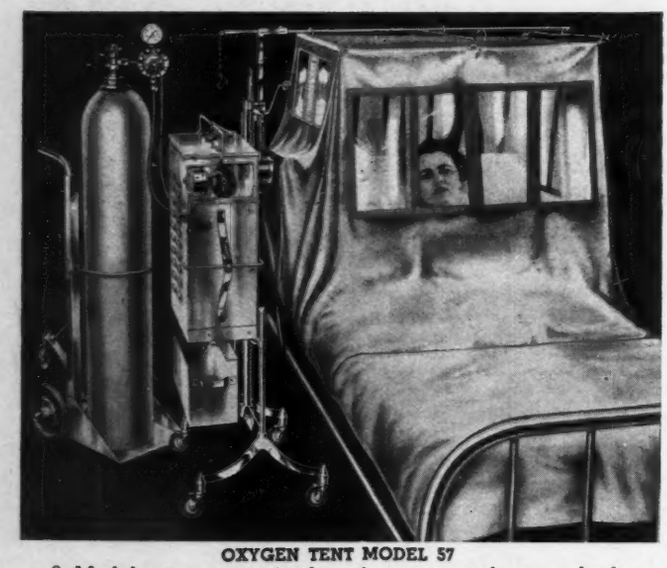
•

The Flow Meters Accuracy in measuring, registering and delivering each gas is assured by the dry-float flowmeters.

STAND MODEL No. 410A

The unequalled performance of the Heidbrink Kinet-O-Meter insures better results at greatly reduced costs. Its many features simplify administration and develop the confidence of the operator.

OXYGEN TENTS



OXYGEN TENT MODEL 57

3 Models—two motorized and one motorless—embody many innovations and features of practicability. Any nurse can perform every duty incident to the application, operation and adjustment of any Heidbrink Tent.

Descriptive literature free upon request.

HI-CO

THE HEIDBRINK COMPANY

MINNEAPOLIS MINNESOTA

The film is available in both 16 mm. and 35 mm. sizes and showings can be arranged through any of the district offices of Linde Air Products Company.

Putting Dirty Water in Its Place

Let's go and mop up the floor with the janitor. Maybe you have wanted to at times, but that isn't what we are getting at. What we are suggesting is that we walk along beside him and see how clean the floor is after he is through mopping it. Are there streaks of dirty cleaning solution left that have dried before he had a chance to rinse it off? If he is using the new Continental Car-Na-Var vacuum-scrubber there won't be because this new two-in-one floor machine has a vacuum nozzle following along after it which, they tell us, picks up the dirty lather and deposits it in the exhaust tank before it gets a chance to dry. It works thus: cleaning solution is fed from a tank through the brush. Then the centrifugal brush distributes the cleaning solution over the surface of the floor, scrubbing as it moves along. Treading on its heels comes the vacuum nozzle to pick up the dirty cleaning solution.

The manufacturers also report that the vacuum-scrubber can be used in shampooing rugs and carpets on the floor. The machine may be used for dry vacuuming, too, or the scrubbing machine alone can be purchased without the vacuum attachment.

Rugs Anchored—How?

Drawing an analogy between slippery rugs and the famous Flying Carpet, B. F. Goodrich Co., Akron, Ohio, jocosely asks, "Who hasn't gone sailing across a polished floor on what appeared to be an innocent gem of the rug weaver's art?" Goodrich's Griptite rug cushion, we are told, prevents those carpet excursions. It is said to anchor rugs firmly on the smoothest floors, and further, protects rugs and runners from wear.

Slicer Saves Thumbs and Crumbs

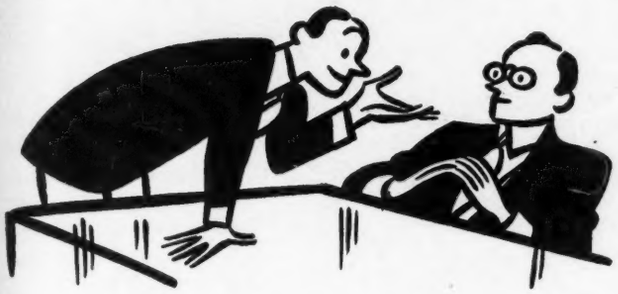
If all the thumbs which have been cut by bread slicers were laid end to end, they'd still be sore. There are dubs in this world who just naturally manage to get their thumbs in the way of anything that can possibly damage them. To put an end to this unnecessary carnage, the U. S. Slicing Machine Company, LaPorte, Ind., introduces their accidentproof electric bread slicer, to which, they say, everything has been done that can be done to make it safe and satisfactory. You simply place a loaf of bread in the machine, set the thickness gauge—another interesting feature—turn the switch and the loaf is delivered on the opposite side in a sliding trough. The knife and all mechanism are said to be fully guarded and there is no chance of unintentionally turning on the power.

This thickness gauge was added to meet the growing demand for bread cut to varying thicknesses. It ranges from $\frac{1}{8}$" to $\frac{11}{16}$".

A Joy Forever

"There is beauty in the bellow of the blast" sang Gilbert and Sullivan half a century ago, and "there is beauty in our new Diadex x-ray unit" sings Westinghouse X-Ray Company, Long Island, N. Y., today. There is, too. It's a very handsome object, designed by Walter Teague who also designed the front cover of The MODERN HOSPITAL.

Putting esthetic considerations aside, we hear what the manufacturer has to say about the movability, portability and efficiency of both the portable and mobile units. They are interchangeable, by the way. A person who buys a



Imagine *My* telling *You* how to buy Limas!

ALL we know is what our figure hounds tell us. And what they told me about lima beans the other day practically floored me. Maybe it'll stagger you, too.

For instance, do you know that of every 25 lbs. of limas you buy, 15½ lbs. are lost in preparation. They are the pods. A total, absolute, no-good waste.

Yet you paid good money for those pods. For you bought those limas by the pound—not by the bean. You paid for the time it took to shell them. You paid for the time it takes to clean up the mess.

We don't claim to be economic professors—but it seems to us there is something basically wrong in paying for anything you can't use.

So we figured out a way to beat this waste. And we've got it all wrapped up for you in a neat little box. In two words, it's Birds Eye.

Birds Eye Lima Beans come all shelled and cleaned. Not an ounce of waste in a carload. Not a pod in the lot. You don't lose any time shelling them. You don't mess up your kitchen in the bargain. All you do is open the box—dish out as many as the menu calls for—and serve limas as *fresh* as the day they were picked from the vine.

How come? Birds Eye Quick-Freezing is the answer. It's a patented process that literally SEALS the farm-freshness right inside the bean. Not one whiff can ever escape. That farm-freshness is imprisoned—to stay!

We have just compiled a booklet giving weight equivalents of Birds Eye Foods versus the market. Write for it. It may open your eyes on food costs—and show you a new way to food profits. You can get your copy by addressing me at Frosted Foods Sales Corp., 250 Park Avenue, New York, N. Y.

Edwin T. Gibson

EDWIN T. GIBSON
PRESIDENT

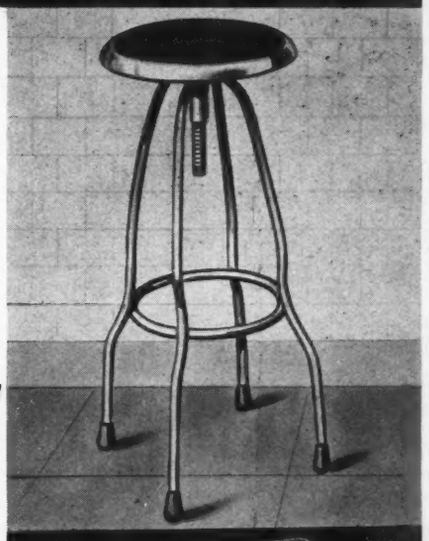
BIRDS EYE
FROSTED FOODS

CONQUEROR LINE

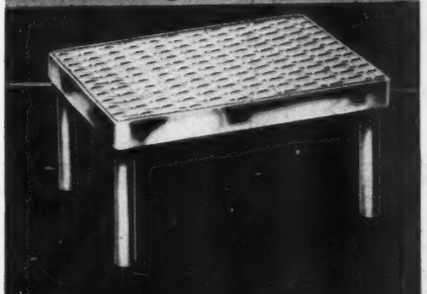
Presents a New Development in

OPERATING ROOM EQUIPMENT

EQUIP FOR PERMANENCE INSTEAD OF REPLACEMENT — INSTALL STAINLESS STEEL EQUIPMENT



Clifton Model
Revolving Stool



Kent Model
Foot Stool

MADE COMPLETELY OF STAINLESS STEEL

● Here are two more items in the CONQUEROR LINE which provide the absolute cleanliness and sterility so vital to Operating Room Equipment. There is no paint, enamel or lacquer on either stool—both are made throughout of chip-free, rust-proof, non-tarnishing, super-sanitary Stainless Steel.

Unlike enameled furniture, Stainless Steel Operating Room equipment can never become shabby or worn. It retains its pristine purity of surface for many years and practically abolishes upkeep expense. Yet, its price is much lower than one would expect—so low that many hospitals are re-equipping Operating Rooms with Stainless Steel furniture in order to make this one department of the hospital entirely sanitary and modern throughout.

● *Write, without obligation, for a typical Operating Room lay-out and thus secure complete illustrations, specifications and prices on this up-to-date equipment.*

THE CONQUEROR LINE EST. 1889 *OF HOSPITAL EQUIPMENT*

S. BLICKMAN, INC.
MANUFACTURERS OF HOSPITAL EQUIPMENT

mobile has a portable by adding the stand and control cover, or a portable can be converted into a mobile at any time. One of the most important features of the mobile unit is the telescopic tube stand which, we are informed, rises smoothly to its full elevation when needed, but modestly folds into itself when not in use. It is mounted on big rubber tired wheels which glide smoothly over obstructions. The portable unit fits in three snug packages each of which can be conveniently carried in a canvas and leather bag provided for the purpose, and the pieces can be quickly assembled into a free rolling, compact unit which may be set up wherever it is needed.

There is another Westinghouse product which has recently been placed on the market which should be of interest to roentgenologists. It is a shockproof tube stand complete with tube and cooling apparatus for deep therapy work embodying, the manufacturers assert, the latest improvements in design and engineering practice.

Enter, Operating Room Boots

Every now and then, comes a new sanitation note. Produced to cover a surgeon's shoes, hose and trouser bottoms is the new "Zippo" slip-over boot of canvas and duck, said to be heavy and sturdy but not uncomfortable. Manufacturer W. W. Stanley Co., Inc., 357 Broadway, New York City, advises that the new boots may be laundered and autoclaved with no resulting shrinkage or loss of shape.

Paging New Literature!

Bubble, Bubble, Scale and Trouble—The mystery is solved! Elgin Softener Corporation, Elgin, Ill., has solved to their satisfaction—and if they are satisfied, you ought to be—the mystery of boiler water treatment. They offer the solution to you in a new sixteen-page bulletin entitled "The Inside Story of Boiler Water Conditioning." This bulletin is a clear, nontechnical discussion of all the various methods of treatment. It shows the importance of selecting the right method of handling the conditioning of various waters and emphasizes the necessity for a thorough understanding of the subject if the boiler room is to be efficiently operated.

Hot, Hotter, Hottest—Temperament is the prerogative of all artists—and who can claim more right to be called an artist than a great chef? Most of them are temperamental, too. Here's one, however, whose temper is always uniform and even. He is the "magic chef" gas range, pride and joy of the American Stove Company of Cleveland. This heavy duty "uniform heat top" range introduces for the first time in the gas industry, says its manufacturer, a closed top with an accurate, uniform heat distribution over the entire cooking top surface of a heavy duty gas range.

There are a lot more interesting details about the "magic chef" set forth and illustrated in the new catalogue which the American Stove Company will be pleased to send you if you ask for it politely.

Branching Out in Books—To their own line of medical books the Physicians' Record Co., 161 West Harrison Street, Chicago, have added standard works of all medical publishers as a service to their customers. They have issued a little pamphlet telling about it. Among the books added to the new department is Dr. Robert T. Morris' best seller, "50 Years a Surgeon."

Noted in Brief—The new price list of biological, biochemical and pharmaceutical products issued by the National Drug Company, 4657 Stenton Avenue, Philadelphia. Also a digest of scientific literature on the subject of the nutritive and therapeutic value of the banana, compiled by the United Fruit Company, Boston.

. . . into a New Epoch of Service

TO some it may be just another doorway. To the postman, a new address—3100 W. Center St., Milwaukee, Wis. But, to us, this modest entrance to our new business home is a symbol—a mark of dreams partially realized; of obstacles met and overcome; a doorway into a new epoch of service to the sick.

In 22 years of meeting the needs of hospitals and sanatoria throughout the United States and Canada, the Will Ross organization has come to know what is wanted — in point of *service from the product* as well as *service from the supplier*. In 22 years we have come to realize the need for departmental segregation and classification of products — in the interests of more efficient service. We have always recognized the fact that a small hospital is entitled to exactly the same consideration as a large hospital — in price, quality, and delivery.

All these things are symbolized by this entrance to a manufacturing and hospital supply house where 16 carefully organized, specialized departments take care of your smallest as well as your largest needs; where 24-hour shipping service continues to be the order of the day; where all are guided by this creed: *The Best is None Too Good* in the Service of the Sick.

WILL

Manufacturers and Distributors